



CDC® FIXED STORAGE DRIVE

PA5A1

PA5A2

DIAGRAMS

Volume 3

HARDWARE MAINTENANCE MANUAL

REVISION RECORD

REVISION	DESCRIPTION
01 (8-25-82)	Preliminary release
02 (9-07-82)	Manual revised to Include Cross References.
A (11-2-82)	Manual released documenting series codes 01 and 02 units. This edition obsoletes all previous editions.
B (5-2-83)	Manual revised to incorporate the following series codes 03, 04, and 05 changes: ECOs DJ05171, DJ05168, DJ05184, DJ05154, DJ05226, DJ05198, FCO DJ05102, technical changes, and editorial changes. Also added dual channel (PA5A2) documentation to manual. This edition obsoletes all previous editions.
C (09-19-83)	Manual revised to incorporate the following series code 05 changes. ECOs DJ03366, DJ03392, technical changes, and editorial changes.
D (12-21-83)	Manual revised to incorporate the following series code 06 and 07 changes: ECO DJ05555, technical changes, and editorial changes.
E (06-22-84)	Manual revised to incorporate series codes 08/09 technical and editorial changes.
F (11-09-84)	Manual revised to incorporate the following series codes 10/11 changes: Class 2 ECOs DJ03655, DJ03675, DJ03676, DJ03714, DJ05874, DJ05950, technical changes, and editorial changes.
G (02-08-85)	Manual revised to incorporate the following series codes 12/13/14 changes: Class 1 ECO DJ03727, Class 2 ECOs DJ03721, DJ03747, DJ03771, DJ03789, DJ03790, DJ03791, technical changes, and editorial changes.
H (04-01-86)	Manual revised to incorporate the following series codes 15/16/17/18/19 changes: Class 1 ECOs DJ03811, DJ03851, DJ03882, Class 2 ECOs DJ03791, DJ03801, DJ03865, DJ03906, DJ28030,

REVISION LETTERS I, O, Q
AND X ARE NOT USED.

Address comments concerning this
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or use Comment Sheet in the back
of this manual.

REVISION RECORD (Contd)

REVISION	DESCRIPTION
	DJ28034, DJ28061, DJ28068, DJ28088, DJ28109, DJ30055, technical changes, and editorial changes. This edition obsoletes all previous editions.

LIST OF EFFECTIVE PAGES

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New features, as well as changes, deletions, and additions to information in this manual are indicated by bars in the margins or by a dot near the page number if the entire page is affected. A bar by the page number indicates pagination rather than content has changed.

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PREFACE

This manual contains maintenance information for the CONTROL DATA® PA5A1/PA5A2 Fixed Storage Drive (FSD). It is prepared for customer engineers and other technical personnel directly involved with maintaining the FSD.

The information in this manual is presented as follows:

Section 1 - Diagrams. Contains logic diagrams.

The following manuals apply to the FSD and are available from Control Data Corporation, Literature Distribution Services, 308 North Dale Street, St. Paul, MN 55103:

<u>Publication No.</u>	<u>Title</u>
83324500	PA5A1/PA5A2 Hardware Maintenance Manual, Volume 1 (contains general description, operation, installation and checkout information, and parts data)
83324510	PA5A1/PA5A2 Hardware Maintenance Manual, Volume 2 (contains theory of operation and maintenance)
83324640	PA5A1/PA5A2 Hardware Maintenance Manual, Volume 3 (contains diagrams)
83325440	RSD/FSD Power Supply Diagrams Manual (contains power supply diagrams, which are intended for reference use only)
83325310	A Guide for the Disk Drive Operator
83325360	Reference Card (provides status code and diagnostics information)
83322440	CDC Microcircuits, Volume 1 (provides functional descriptions for integrated circuits)
83324440	CDC Microcircuits, Volume 2 (provides functional descriptions for integrated circuits)

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IMPORTANT SAFETY INFORMATION AND PRECAUTIONS

Proper safety and repair is important to the safe, reliable operation of this unit. Service should be done by qualified personnel only. This maintenance manual describes procedures recommended by the manufacturer as effective methods of servicing the unit. Some of these procedures require the use of specially designed tools. For proper maintenance and safety, these specially designed tools should be used as recommended.

The procedures in this maintenance manual and labels on the unit contain warnings and cautions which must be carefully read and observed in order to minimize or eliminate the risk of personal injury. The warnings point out conditions or practices that are potentially hazardous to maintenance personnel. The cautions point out practices which, if disregarded, could damage the unit and make it unsafe for use.

For the safety of maintenance and operating personnel, the following precautions must be observed:

- Perform all maintenance by following the procedures given in this manual and using only CDC/MPI replacement parts.
- Read and observe all cautions and warnings provided in the procedures and labeled on the unit.
- Use the special tools called out in the maintenance procedures.
- Observe sound safety practices when performing maintenance.
- Use caution when troubleshooting a unit that has voltages present. Remove power from unit before servicing or replacing components.
- Wear safety glasses when servicing units.
- Wear safety shoes when removing or replacing heavy components.

It is also important to understand that these warnings and cautions are not exhaustive. The manufacturer could not possibly know, evaluate and advise maintenance personnel of all conceivable ways in which maintenance might be performed or the possible risk of each maintenance technique. Consequently, the manufacturer has not completed any such broad evaluation. Thus, any persons who use any non-approved maintenance procedure or tool must first satisfy themselves that neither their safety nor the unit performance will be jeopardized by the maintenance techniques they select.

ABBREVIATIONS

A	Ampere	CLK	Clock
ABV	Above	CLR	Clear
ac	Alternating Current	cm	Centimeter
ADD	Address	CNTR	Counter
ADDR	Address	COMP	Comparator
ADJ	Adjust	CONT	Control
ADRS	Address	CONTD	Continued
AGC	Automatic Gain Control	CT	Center Tap
ALT	Alternate	CYL	Cylinder
AM	Address Mark	D/A	Digital to Analog
AME	Address Mark Enable	dc	Direct Current
AMP	Amplifier, Ampere	DET	Detect
ASSY	Assembly	DIFF	Differential
BLW	Below	DIV	Division
C	Celsius	DLY	Delay
CB	Circuit Breaker	DRVR	Driver
CDA	Complete Drive Assembly	ECL	Emitter Coupled Logic
CDC	Control Data Corporation	ECO	Engineering Change Order
CH	Channel	EN	Enable
CHK	Check	ENBL	Enable

ABBREVIATIONS (Contd)

EXT	External	IND	Index
F	Fahrenheit, Fuse	INTRPT	Interrupt
FCO	Field Change Order	I/O	Input/Output
FDBK	Feedback	IPB	Illustrated Parts Breakdown
FIG	Figure	IPS	Inches per Second
FLT	Fault	kg	Kilogram
FSD	Fixed Storage Drive	kPa	Kilopascal
ft	Foot	kW	Kilowatt
FTU	Field Test Unit	lb	Pound
FWD	Forward	lbf	Pounds/Force
GND	Ground	LED	Light Emitting Diode
HD	Head	LSI	Large Scale Integration
HEX	Hexagon	LTD	Lock to Data
Hg	Mercury	m	Meter
HR	High Resolution	MAX	Maximum
HYST	Hysteresis	MB	Megabyte
Hz	Hertz	MEM	Memory
IC	Integrated Circuit	MHz	Megahertz
IDENT	Identification	mm	Millimeter
in	Inch		

ABBREVIATIONS (Contd)

MPI	Magnetic Peripherals, Inc.	PROG	Programmable
MPU	Microprocessor Unit	PS	Power Supply
MRK	Mark	PWR	Power Supply
ms	Millisecond	RCVR	Receiver
MTR	Motor	RD	Read
mV	Millivolt	RDY	Ready
N	Newton	REF	Reference
NC	No Connection	REQ	Request
NORM	Normal	RES	Resolution
NRZ	Non Return to Zero	REV	Reverse, Revision
ns	Nanosecond	RGTR	Register
OC	On Cylinder	r/min	Revolutions Per Minute
OS	One-Shot	RSD	Removable Storage Drive
OSC	Oscillator	RTZ	Return to Zero
P	Plug	R/W	Read/Write
PD	Peak Detect	s	Second
pF	Picofarad	S/C	Series Code
PG	Page	SEC	Second
PHH	Phillips Head	SEL	Select
PLO	Phase Lock Oscillator	SEQ	Sequence
PROC	Procedure	SPD	Speed

ABBREVIATIONS (Contd)

SS	Sector Switch	W	Watts
T	Tracks to go	W/	With
TF	Thread Forming	W/O	Without
TIM	Timer	W PROT	Write Protect
TP	Test Point	W+R	Write or Read
TSP	Troubleshooting Procedure	W·R	Write and Read
TTL	Transistor-Transistor Logic	WRT	Write
		XFR	Transfer
V	Volts, Voltage	Ω	Ohms
Vbb	Bias Voltage	\$	Hexadecimal Address
VCC	Bias Voltage	uF	Microfarad
VCO	Voltage Controlled Oscillator	us	Microsecond

SECTION 1

DIAGRAMS

INTRODUCTION

This section contains the logic diagrams and an explanation of the diagram conventions. The diagram conventions, along with the microcircuit manuals, provide the necessary information to understand and use the diagrams. The diagram conventions are:

- Symbology
- Abbreviations
- Logic Levels
- Signal Names
- Logic Arrangement
- Intersheet References

SYMBOLOLOGY

GENERAL

The diagrams contain a modified version of ANSI standard Y32.14 logic symbology (see figure 1-1). The logic symbols for integrated circuits contain a qualifying symbol, an element identifier, and a location code.

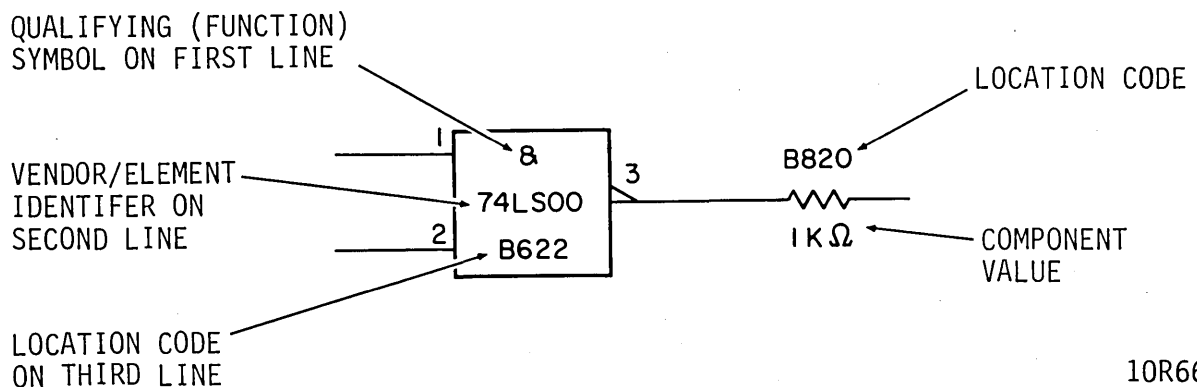


Figure 1-1. Logic Symbology

QUALIFYING (FUNCTION) SYMBOL

The qualifying symbol denotes the basic operation being performed by the integrated circuit. Refer to the microcircuits manual for an explanation of the qualifying symbols used in the diagrams.

ELEMENT IDENTIFIER

The second line of any symbol contains the vendor/element identifier. This number identifies the integrated circuit type. Refer to the microcircuits manuals for an explanation of the element identifiers used in the diagrams.

LOCATION CODE

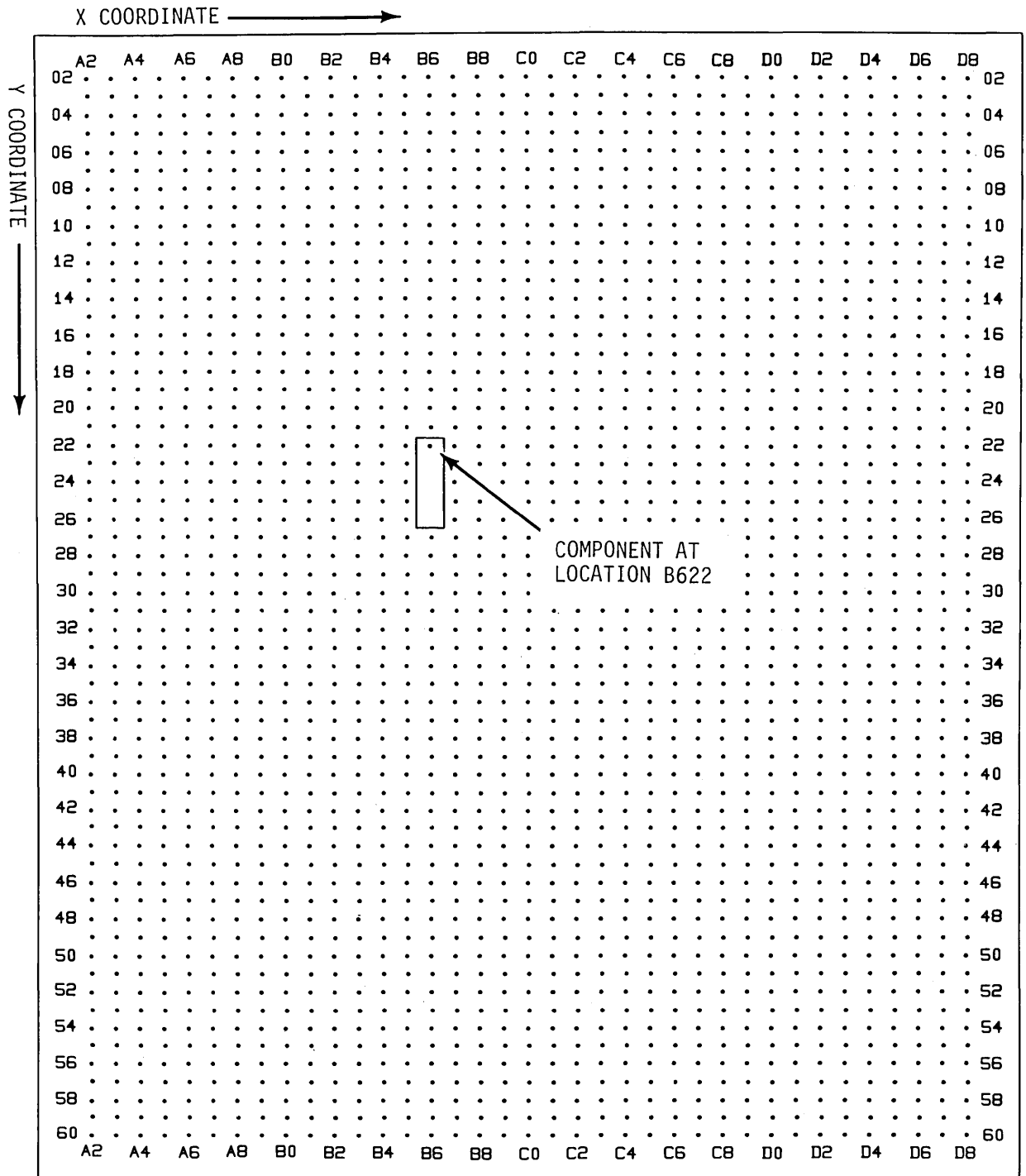
The location code identifies the location of each component on the circuit board. The location code is a four-character XXYY designation related to an X-Y grid defined on the edges of the circuit board. To avoid confusion, the "XX" characters are alpha-numeric and the "YY" characters are numeric. Figure 1-2 shows a circuit board with a component at location code B622, which is the intersection of grid lines B6 (X) and 22 (Y).

ABBREVIATIONS

Standard abbreviations from ANSI Y1.1 are used whenever possible. Refer to the list of abbreviations contained in the front matter for a definition of all abbreviations used in the diagrams.

LOGIC LEVELS

Three types of logic are used in the drives that this manual applies to: TTL logic, ECL logic, and CMOS logic. Logic levels for the three types are shown in table 1-1. Different circuit configurations and temperatures may result in legitimate readings that fall outside of the typical range. Such readings should be suspect only in the event of problems.



10R67

Figure 1-2. Location Code Example

TABLE 1-1. LOGIC VOLTAGE LEVELS

Logical State	Nominal Voltage	Typical Range
TTL "1"	3.3 V	2.0 V to 3.3 V*
TTL "0"	0.2 V	0.2 V to 0.8 V
ECL "1"	-0.924 V	-0.96 V to -0.81 V
ECL "0"	-1.75 V	-1.65 V to -1.85 V
CMOS "1"	5.0 V	3.5 V to 5.0 V
CMOS "0"	0 V	0 V to 1.5 V

*Measuring a TTL open collector voltage may result in a reading that is close to the actual power supply voltage.

SIGNAL NAMES

Input and output signals are labeled to reflect their particular function. If an output signal has no connection, and therefore no function, it is labelled "NC" to indicate no connection. The polarity (logical state) of a signal is identified by a plus or minus sign before the signal name. A plus sign before a signal name indicates that the signal is active when the logic level is high or in a logical "1" state. A minus sign before a signal name indicates that the signal is active when the logic level is low or in a logical "0" state. Refer to the discussion on logic levels.

LOGIC ARRANGEMENT

Logic diagrams for the drive consist of overall block diagrams and independent diagram sets for the interlocks, the detachable cables, and the circuit boards. The diagram sets are presented in the order given in table 1-2. Refer to figure 1-3 for the location of the circuit boards in the drive.

Each diagram set consists of one or more sheets with each sheet identified by the sheet number which appears in the lower right-hand corner of the page. The first sheet in each set, the cover sheet, is described in the following paragraph.

TABLE 1-2. CONTENTS OF DIAGRAMS

Card Type	Cross Ref. Number	Title
	0002	24" FSD Block Diagram
_PBX	01XX	Operator Panel
_EBN	02XX	Single Channel I/O
_EDN	02XX	Dual Channel I/O
_UBN	03XX	Servo Preamp
_PXX	04XX	Control Board
_QHX	05XX	Power Amp
_PMX	06XX	Motor Speed Control
_PGX	07XX	Read/Write PLOs
_RUX	075X	Read/Write PLO/Data Latch
_PFX	08XX	Data Latch
_EYN	09XX	R/W Preamp
	1002	DC Harness Cabling Diagram
	1012	Control Board to I/O Board Cable
	1022	Control Board to Data Latch & R/W PLOs Cable
	1032	Motor Speed Control to Motor Cable
	1042	Interlocks

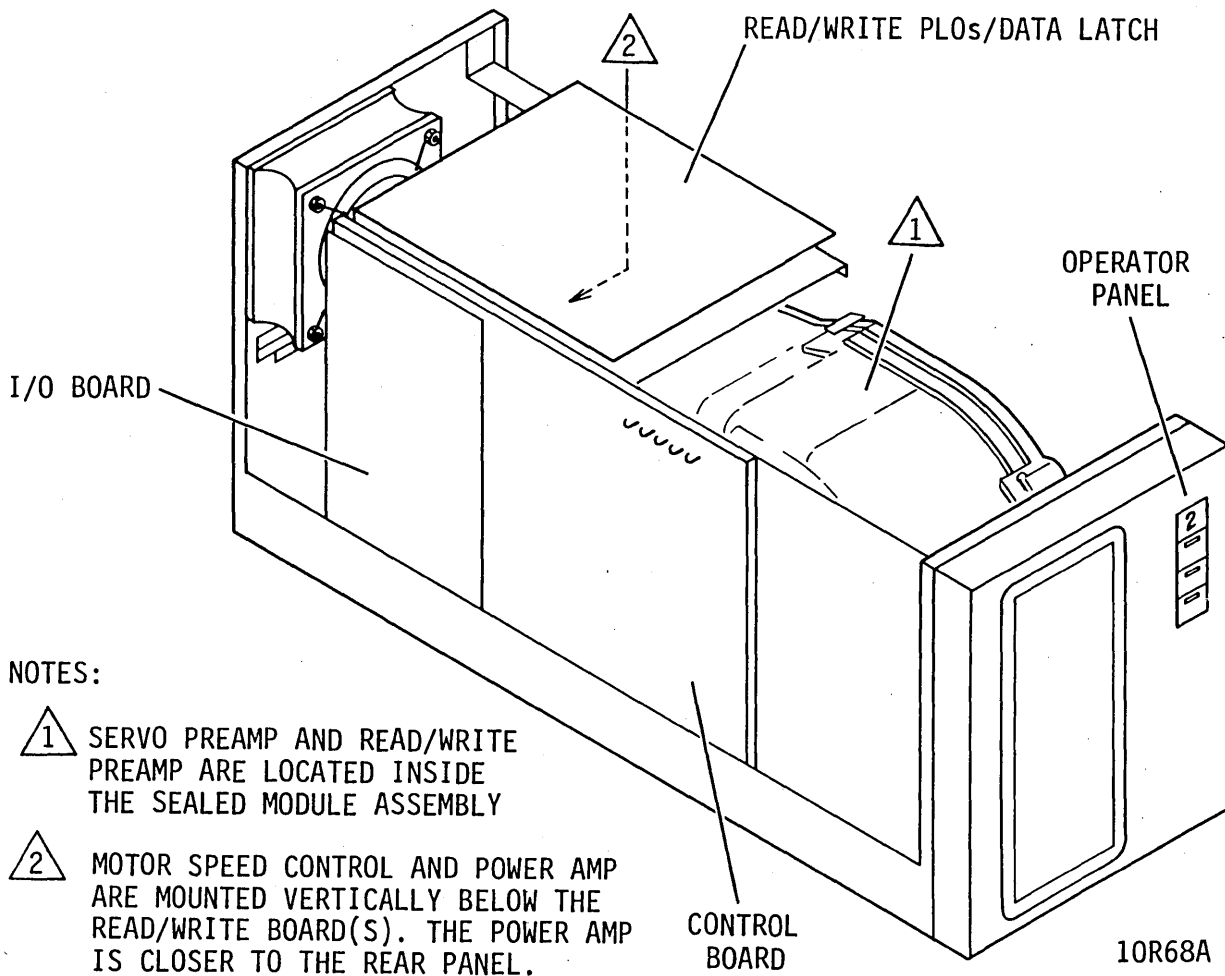


Figure 1-3. Circuit Board Locations

LOGIC DIAGRAM COVER SHEETS

The logic diagram cover sheet is the first sheet of each logic set. It contains power and ground connections, and lists unused logic elements.

CIRCUIT BOARD TYPE

The circuit board type designation is shown on sheet 1 in the title block.

INTERSHEET REFERENCES

Each logic diagram is assigned a four-digit cross-reference number and a two-digit sheet number. The first two digits of the cross-reference number indicate the assigned set number, and the last two digits indicate the sheet number within that set. Table 1-2 lists the cross-reference number for each logic diagram set. The following paragraphs discuss how to trace signals from one point to another in the diagrams and refer to both the sheet numbers and the cross-reference numbers.

The procedure for tracing signals in the logic diagrams depends on whether the signal path continues on the same sheet, on another sheet in the same logic set, or on a sheet in a different logic set. These three cases are symbolized differently in the logic (see figure 1-4) and are discussed separately in the following paragraphs.

When a logic signal is continued on the same sheet but cannot be shown in series, "line of sight" arrows along with a letter within a circle are used to indicate signal origin and destination.

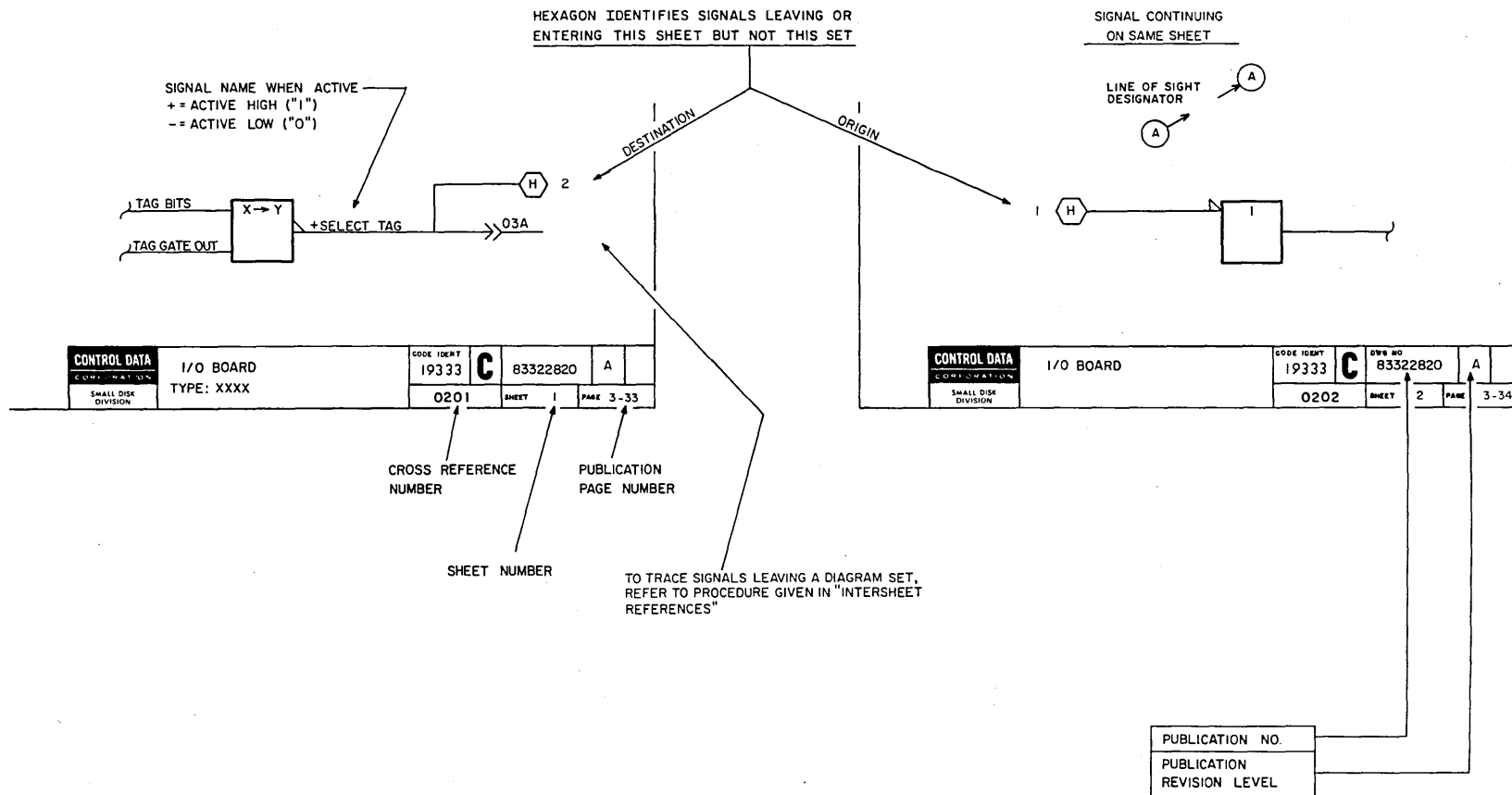
When a logic signal is continued on another sheet of the same logic set, that sheet number appears next to a hexagon containing a designating letter. This same letter is then shown where the signal is continued.

When a signal is continued on a sheet of another logic set, it follows a path through a cable from one circuit board to another. Each sheet of logic which has signals coming from or going to other circuit boards is accompanied by a Logic Cross Reference Information sheet, printed on the page facing the logic sheet. Logic Cross Reference Information lists all signal inputs and signal outputs in the order they appear on the logic sheet. Each signal input listing includes the cross-reference number of the logic sheet where the signal originates and the connector and pin number for the signal origin. Each signal output listing includes the crossreference number of the logic sheet where the signal goes and the connector and pin number for the signal destination.

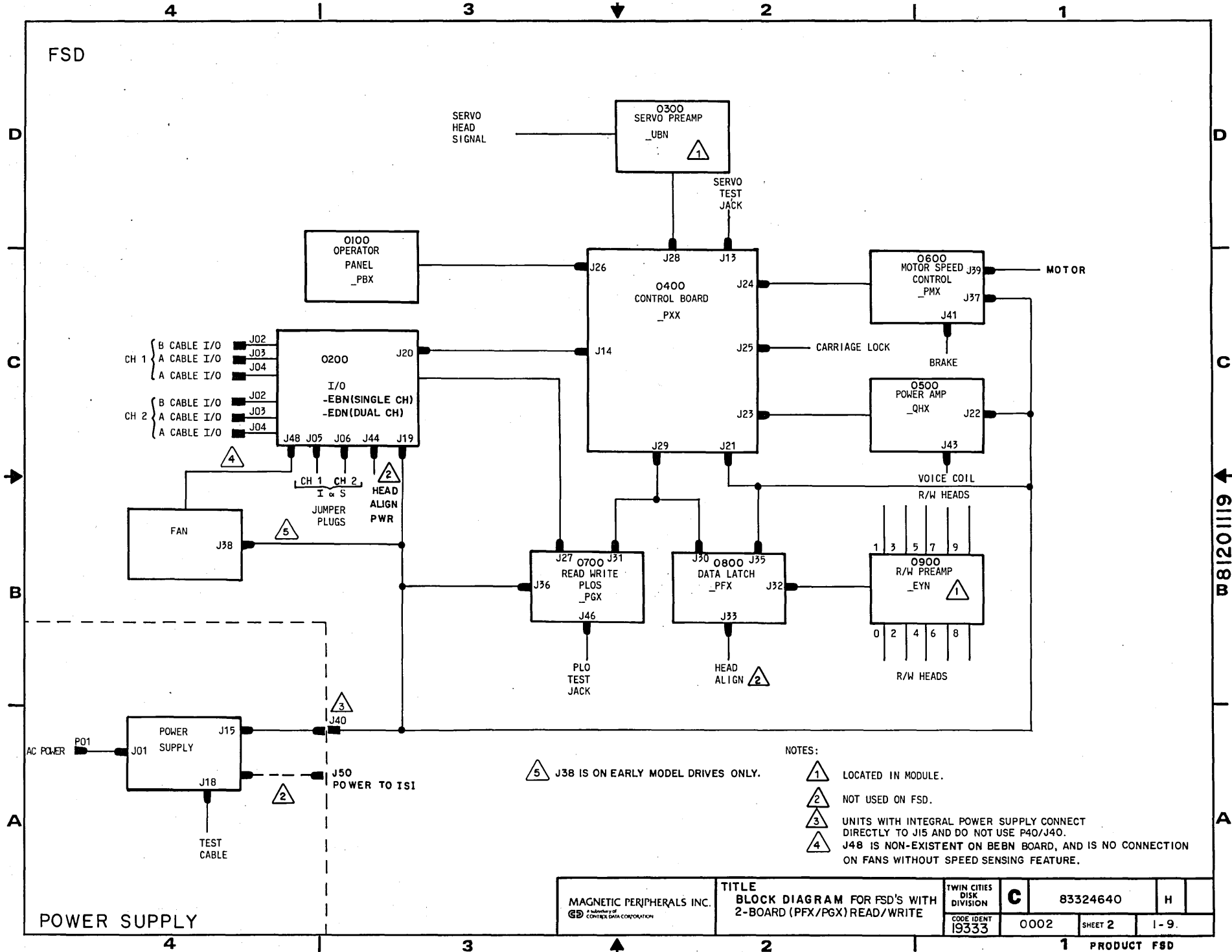
Each logic sheet is linked to its associated Logic Cross Reference Information sheet by the connector and pin symbols that are duplicated on both sheets. For instance, if a logic sheet shows a signal entering the board on pin 1 of connector J14, then the Logic Cross Reference Information sheet has the following entry under Signal Inputs:

```
01    J14  
---->-----|
```

Figure 1-4. Key to Logic



FSD



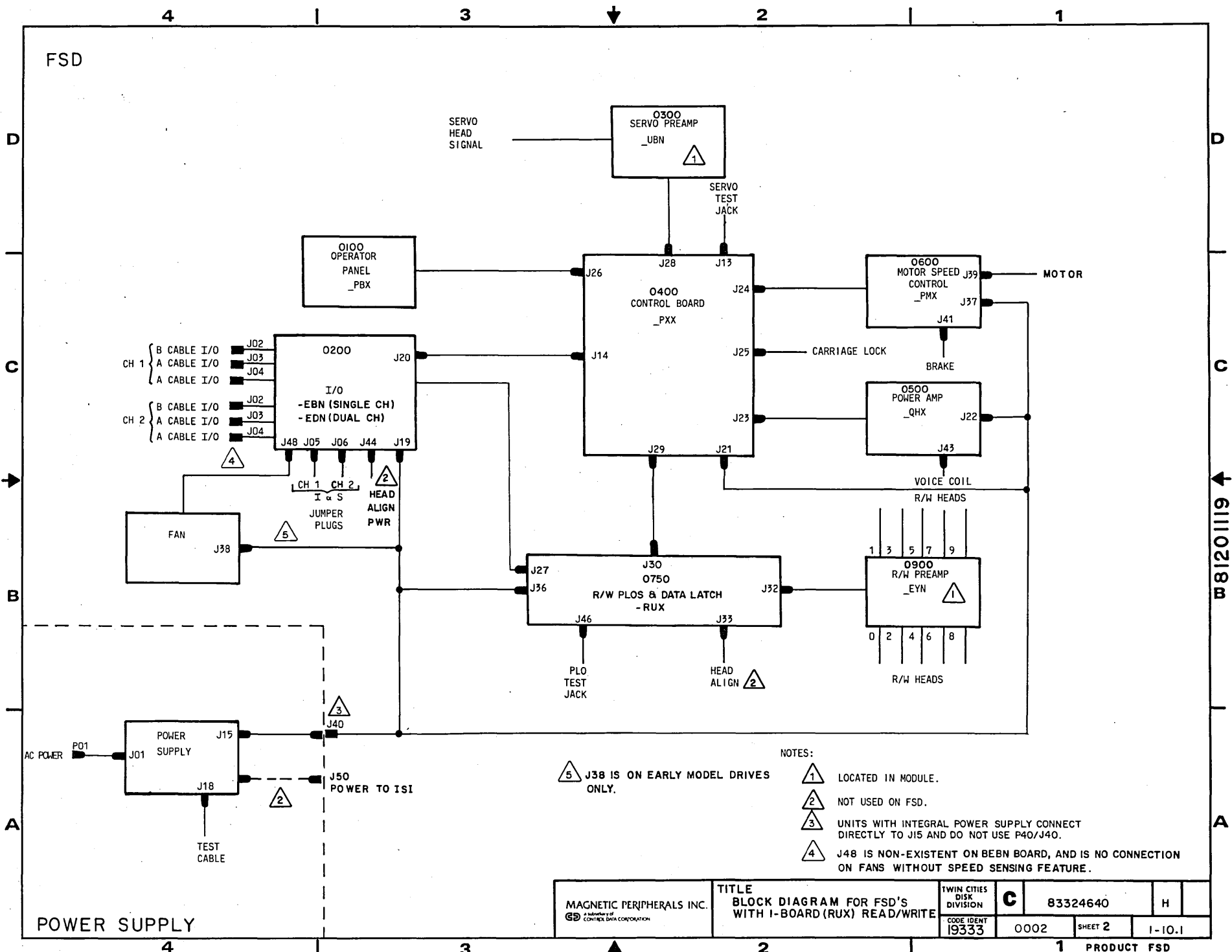
- NOTES:
- 1 LOCATED IN MODULE.
 - 2 NOT USED ON FSD.
 - 3 UNITS WITH INTEGRAL POWER SUPPLY CONNECT DIRECTLY TO J15 AND DO NOT USE P40/J40.
 - 4 J48 IS NON-EXISTENT ON BEBN BOARD, AND IS NO CONNECTION ON FANS WITHOUT SPEED SENSING FEATURE.

POWER SUPPLY

MAGNETIC PERIPHERALS INC. A member of GD CONTROL DATA CORPORATION	TITLE	TWIN CITIES DISK DIVISION	C	83324640	H
	BLOCK DIAGRAM FOR FSD'S WITH 2-BOARD (PFX/PGX) READ/WRITE	CODE IDENT 19333	0002	SHEET 2	1-9.

1 PRODUCT FSD

FSD



- NOTES:
- 1 LOCATED IN MODULE.
 - 2 NOT USED ON FSD.
 - 3 UNITS WITH INTEGRAL POWER SUPPLY CONNECT DIRECTLY TO J15 AND DO NOT USE P40/J40.
 - 4 J48 IS NON-EXISTENT ON BEBN BOARD, AND IS NO CONNECTION ON FANS WITHOUT SPEED SENSING FEATURE.

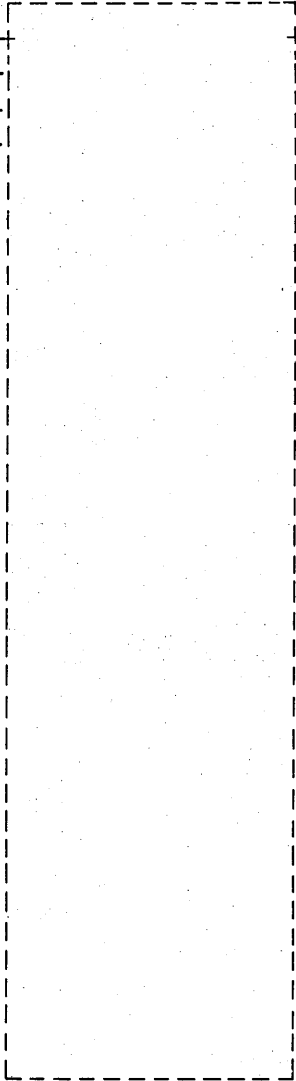
MAGNETIC PERIPHERALS INC. a subsidiary of GE CONTROL DATA CORPORATION	TITLE BLOCK DIAGRAM FOR FSD'S WITH I-BOARD (RUX) READ/WRITE	TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0002	SHEET 2	1-10.1	

POWER SUPPLY

B8120119

SIGNAL INPUTS

0402 J26-02 -02->>-P26
0402 J26-04 -04->>-P26
0402 J26-01 -01->>-P26
0402 J26-06 -06->>-P26



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0101	PAGE	1-10,2

4

3

2

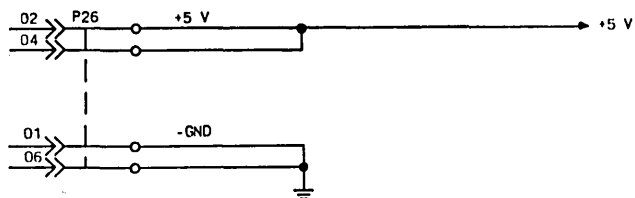
1

PART NO.
RANGE

00 THRU 99

REVISION RECORD

REV	ECO	DESCRIPTION	DRF	DATE	CHKD	APP
01	DJ05010A	PRE-RELEASED	DLM	4/22/82	DGD	I
A	DJ05010B	RELEASED	DLM	4/16/82	DGD	II
B	DJ03132	CORRECTIONS	DLM	10/16/82	DGD	II
C	DJ05856	DPBX TO HPBX	JS	11-27-84		
D	DJ28034	CORRECTION	CB	4/30/86		



REFERENCE DRAWING			MAGNETIC PERIPHERALS INC		TITLE		
COMP. ASSY. 54330903			GD		SCHEMATIC DIAGRAM		
CTR 54331103			FIRST USED ON		OPERATOR PANEL		
			NEXT ASSEMBLY		TYPE DPBX/HPBX		
			PA5A1-A				
COMPONENTS EXCEPT AS NOTED			DWN	FAE AUDETTE	11/23/81	SIZE	
TOLERANCE	VALUE	RATING	CHKD	De-Donat	4/16/82	SMALL DISK DIVISION	
RES			ENGR	W. J. Nelson	4/16/82	C	83324640
CAP			MIG			H	
			QA	W. J. Nelson	4/16/82	FSCM. NO	
						19333	
						CROSS REF NO 0101	SHEET 1 OF 3
							PAGE 1-11

4

3

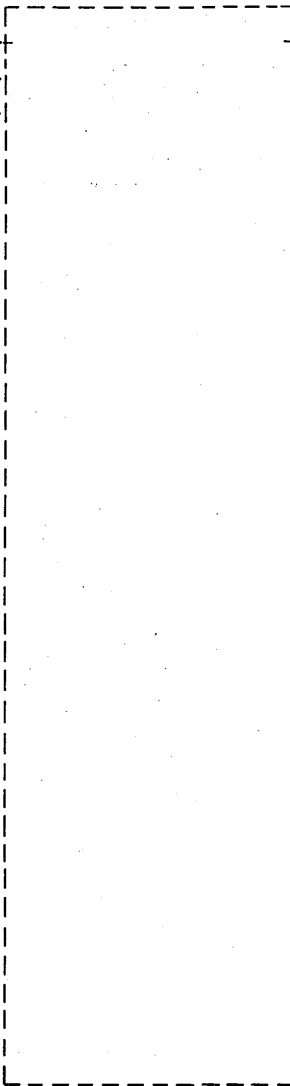
2

REF: 54331003

1

SIGNAL INPUTS

0405 J26-07 07 ->> P26
 0409 J26-13 13 ->> P26
 0409 J26-12 12 ->> P26

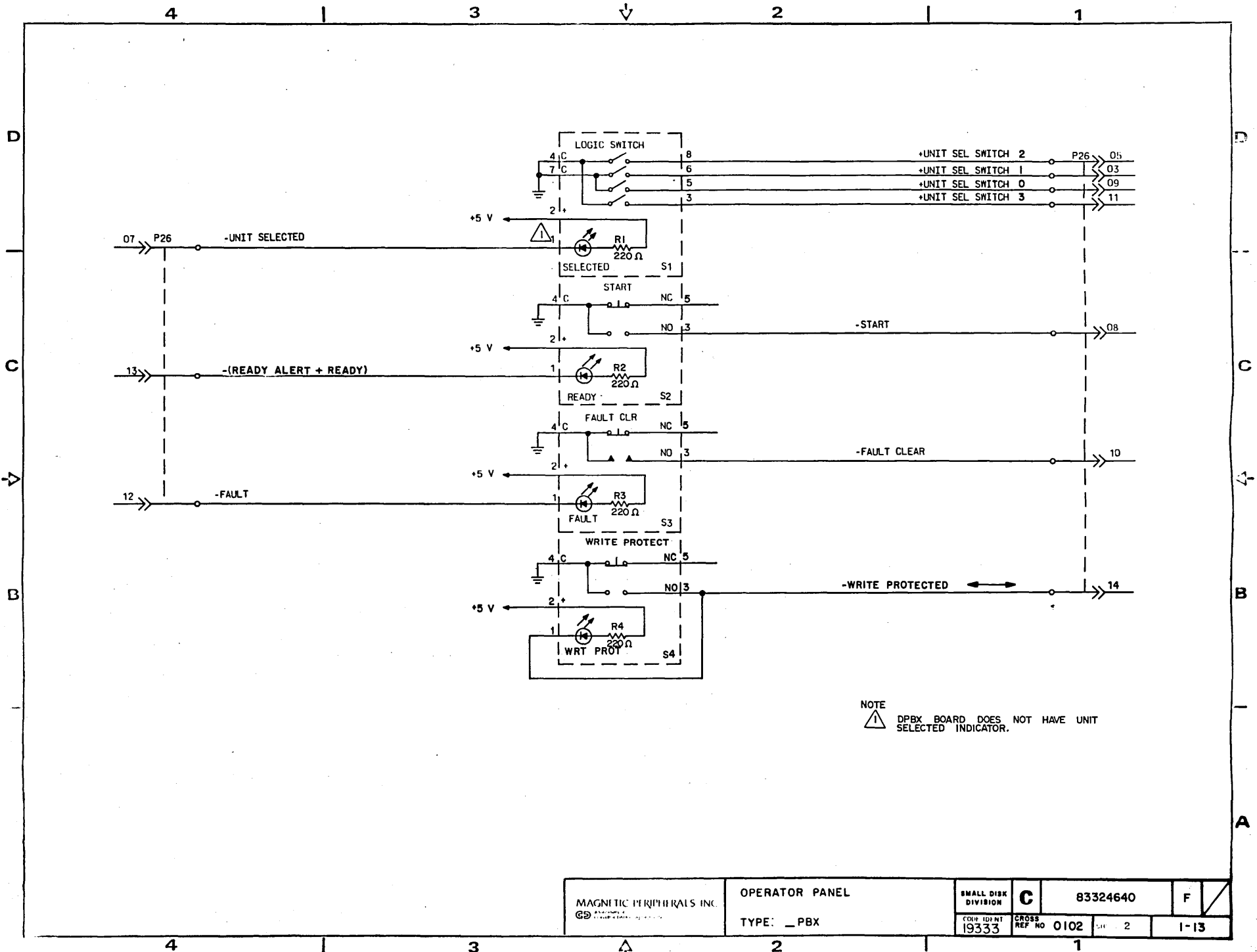


SIGNAL OUTPUTS

P26 ->> 05 0405 J26-05
 P26 ->> 03 0405 J26-03
 P26 ->> 09 0405 J26-09
 P26 ->> 11 0402 J26-11
 P26 ->> 08 0407 J26-08
 P26 ->> 10 0408 J26-10
 P26 ->> 14 0409 J26-14

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV B
CROSS REF NO 0102	PAGE 1-12	

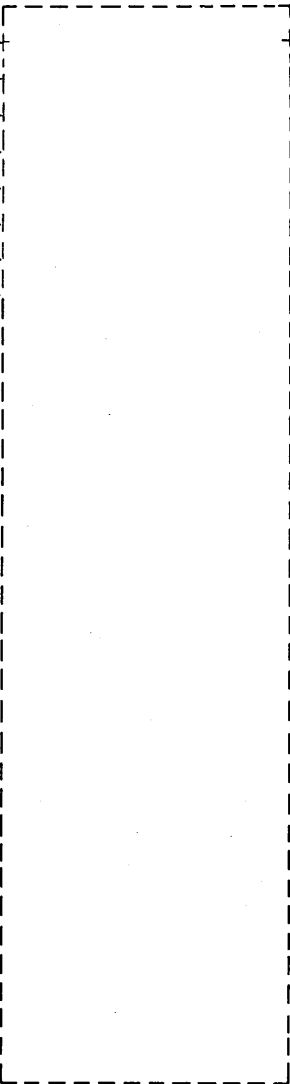


NOTE
 DPBX BOARD DOES NOT HAVE UNIT SELECTED INDICATOR.

MAGNETIC PERIPHERALS INC. GD	OPERATOR PANEL		SMALL DISK DIVISION	C	83324640	F
	TYPE: _PBX		CONF IDENT 19333	CROSS REF NO 0102	2	1-13

SIGNAL INPUTS

1002	P15-11	05	->>	J19	- - - - -
NC	-	07	->>	J19	- - - - -
1002	P15-01	08	->>	J19	- - - - -
1002	P15-02	03	->>	J19	- - - - -
NC	-	04	->>	J19	- - - - -
1002	P15-03	01	->>	J19	- - - - -
1002	P15-15	06	->>	J19	- - - - -
NC	-	02	->>	J19	- - - - -



SIGNAL OUTPUTS

J44	->>	04	NC	-
J44	->>	06	NC	-
J44	->>	03	NC	-
J44	->>	01	NC	-
J44	->>	05	NC	-

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0201	PAGE 1-16	

UNUSED LOGIC ELEMENTS

TYPE	LOCATION	OUTPUT PINS
10125	C204	12, 1
9602	E844	9, 10
74LS04	E865	8, 9, 10
74LS02	E855	13
7404	C821	8
4049	D811	2, 6, 10, 15
10125	C902	12

UNUSED RESISTOR PACKS

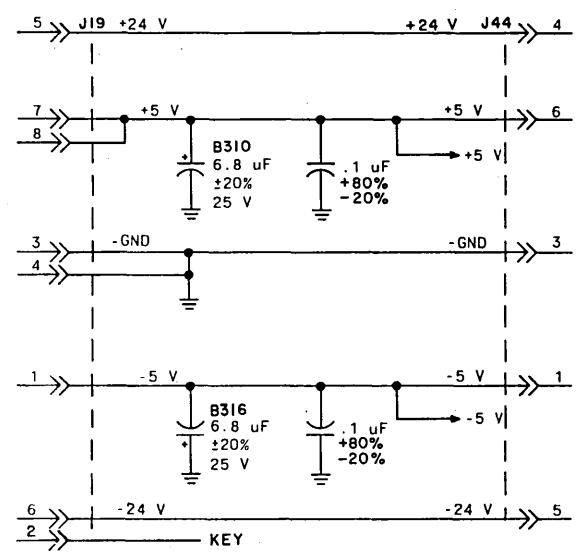
VALUE	LOCATION	PINS
1 k Ω	E543	2, 3, 5, 7
1 k Ω	E055	8
82 Ω	B844	6, 7, 8
470 Ω	C009	4, 5, 8
1 k Ω	D332	6, 7, 8

FILTER CAPS ²

.1 μ F	
+5 V	-5 V
C721	B322
A525	C733
C021	C611
B333	E045
D257	A625
E657	C756
C633	E745
C711	D245
D225	D357
D945	D956
C645	C745
	C621

PART NO RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
00 THRU 99	01	DJ03019A	PRE-RELEASED		7/2/82	D6-D	II
	02	D503056	CHG IC SHT 5	DLM	6/21/82	D6-D	II
	03	DJ03082	LSI PIN 14 GND	DLM	6/24/82	D6-D	II
	04	DJ03082	KEY TR1/GND	DLM	7/2/82	D6-D	II
	A	D503098	RELEASED	DLM	10/20/82	D6-D	II
	B	DJ03132	CORRECTIONS	DLM	10/15/82	D6-D	III
C	DJ03177	CORRECTIONS	MJ	3-2-83			
D	DJ03237	REPLACE CHIP	MJ	3-2-83			
E	DJ03335	CORRECTIONS	MJ	9-12-83			

- NOTES:
- UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GND AND PIN 14 CONNECTED TO +5 V.
ALL DIODES, 15165500.
ALL RESISTOR PACK RESISTORS 1/8 W, $\pm 3\%$.
 - SEE TABLE FOR FILTER CAP LOCATIONS.
 - J05 IS A/B CABLE JUMPER.

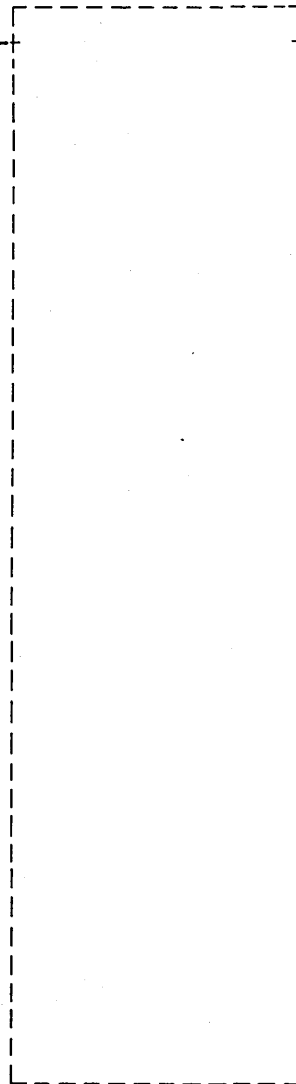


APPLIES TO SINGLE CHANNEL UNITS ONLY.

REFERENCE DRAWING			MAGNETIC PERIPHERALS INC.			TITLE		
COMP ASSY 54020501			G.D. A DIVISION OF CONTROL DATA CORPORATION			SCHEMATIC DIAGRAM		
CTR 54020701			FIRST USED ON PA3AI-A			SINGLE CH SMD I/O		
COMPONENTS, EXCEPT AS NOTED			DWN DLM 3/1/82			TYPE BEBN		
TOLERANCE	VALUE	RATING	CHKD	ENGR	MFG	SIZE	SMALL DISK DIVISION	
RES $\pm 5\%$	OHMS	1/4W	Dennis G. D... 4/30/82	AS Nelson 11/21/82	P.N.A. Co.	C	83324640	
CAP $\pm 10\%$							C	
			QA	19333			CROSS REF NO 0201	
						SHEET 1 OF 7		REF: 54020801
						PAGE 1-17		

SIGNAL INPUTS

0405 J14-10 ~~21~~ >> J20



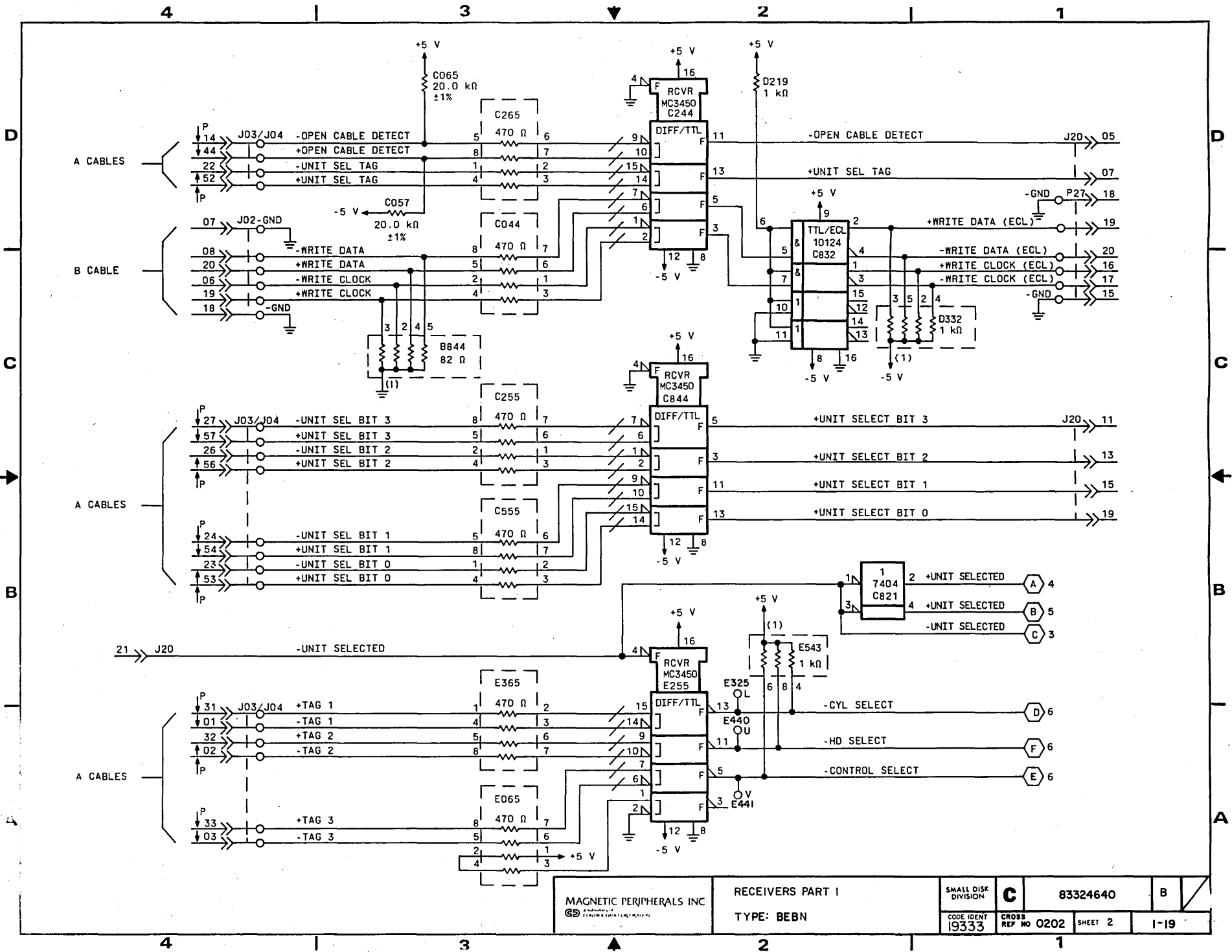
SIGNAL OUTPUTS

J20 >> 05	0405 J14-18
J20 >> 07	0405 J14-17
P27 >> 18	0701* J27-18
	0751* J27-18
P27 >> 19	0702* J27-19
	0752* J27-19
P27 >> 20	0702* J27-20
	0752* J27-20
P27 >> 16	0702* J27-16
	0752* J27-16
P27 >> 17	0702* J27-17
	0752* J27-17
P27 >> 15	0701* J27-15
	0751* J27-15
J20 >> 11	0405 J14-15
J20 >> 13	0405 J14-14
J20 >> 15	0405 J14-13
J20 >> 19	0405 J14-11

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

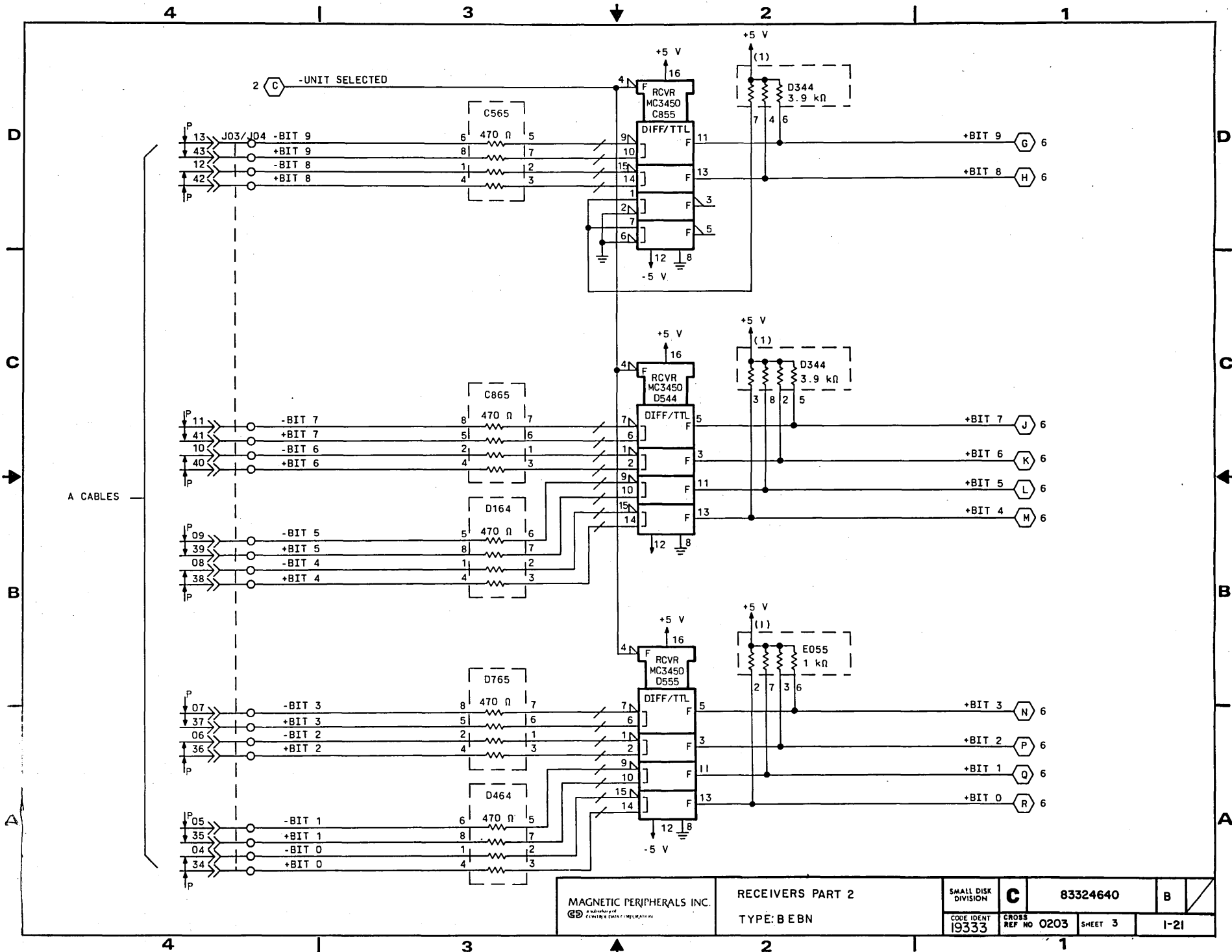
PUB		REV
83324640		H
CROSS REF NO	PAGE	
0202	1-18	



MAGNETIC PERIPHERALS INC.
AN INSTRUMENT DIVISION OF
 GE

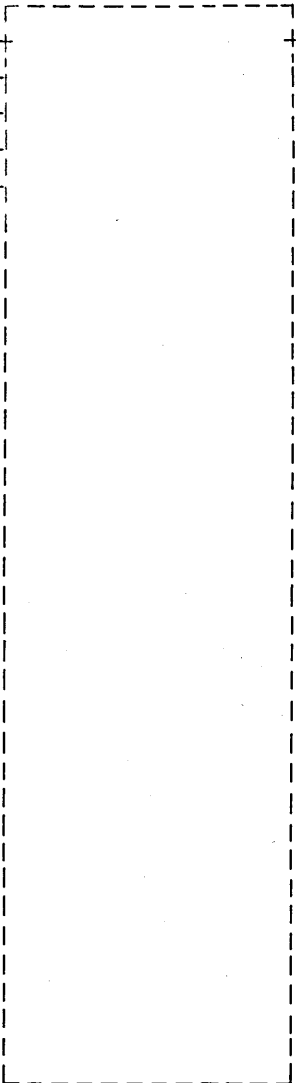
RECEIVERS PART I
 TYPE: BEBN

SMALL DISK DIVISION	C	83324640	B
CODE IDENT 19333			



SIGNAL INPUTS

0410	J14-20	01	->>	J20
0410	J14-35	30	->>	J20
0409	J14-24	08	->>	J20
0407	J14-12	17	->>	J20
0705*	J27-05	05	->>	P27
0758*	J27-05			

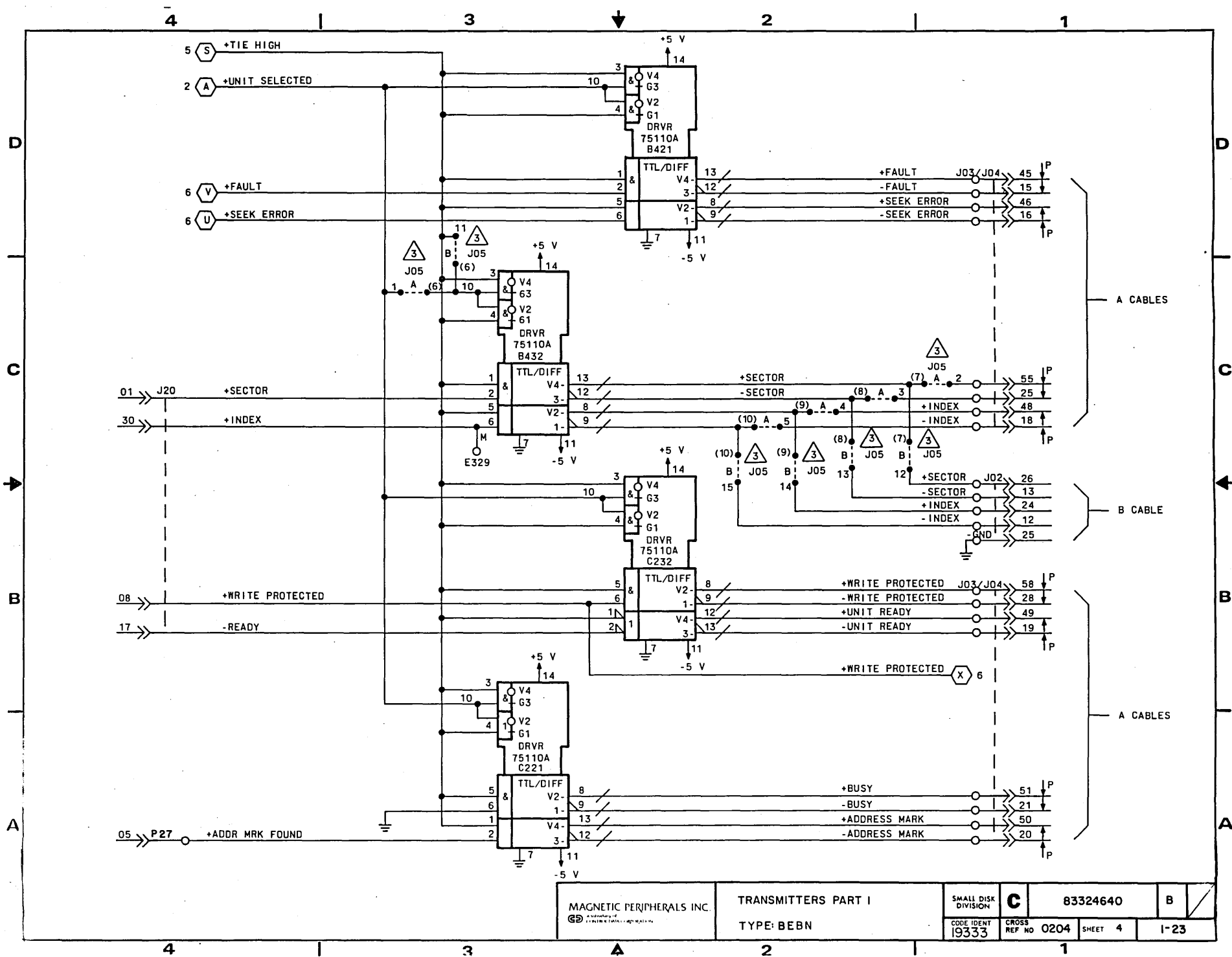


SIGNAL OUTPUTS

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

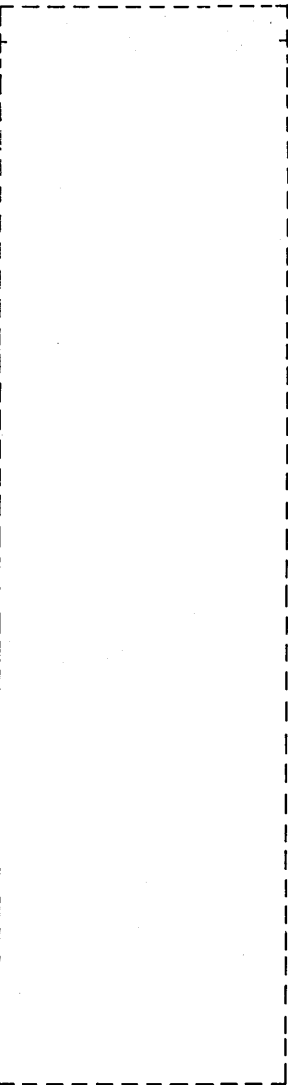
LOGIC CROSS REFERENCE INFORMATION

PUB		83324640		REV		H	
CROSS REF NO		0204		PAGE		1-22	



SIGNAL INPUTS

0703* J27-01 01 -->> P27
 0753* J27-01
 0703* J27-02 02 -->> P27
 0753* J27-02
 0702* J27-14 14 -->> P27
 0752* J27-14
 0702* J27-13 13 -->> P27
 0752* J27-13
 0702* J27-11 11 -->> P27
 0752* J27-11
 0702* J27-10 10 -->> P27
 0752* J27-10
 0701* J27-12 12 -->> P27
 0751* J27-12
 0410 J14-16 09 -->> J20



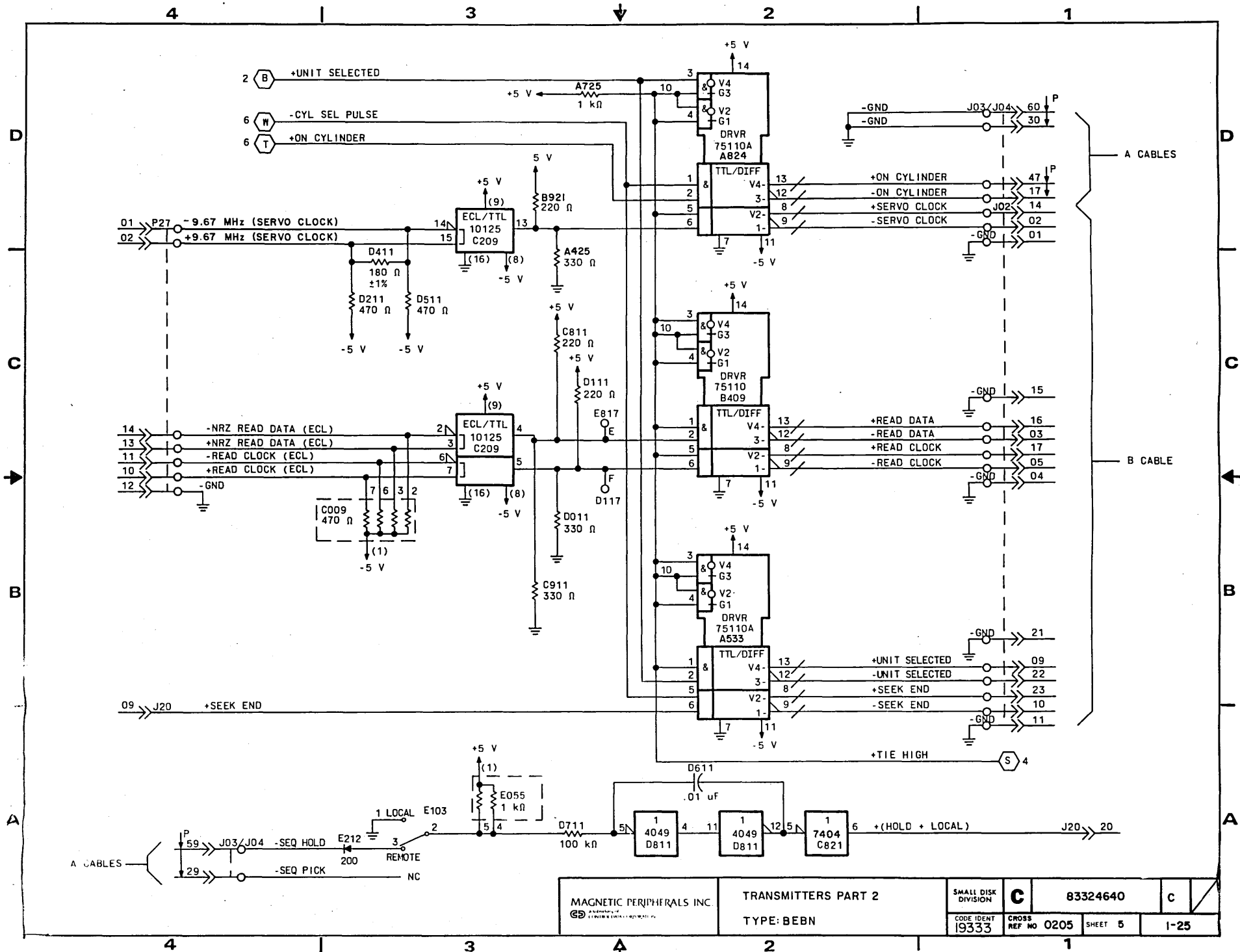
SIGNAL OUTPUTS

J20 -->> 20 0407 J14-30

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

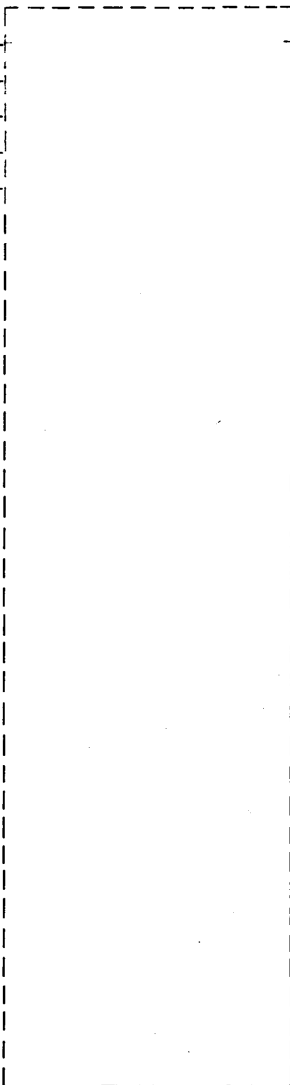
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0205	PAGE	1-24



SIGNAL INPUTS

0409 J14-31 22 >> J20
 0406 J14-08 25 >> J20
 0406 J14-09 23 >> J20
 0403 J14-29 18 >> J20
 0704* J27-08 08 >> P27
 0757* J27-08



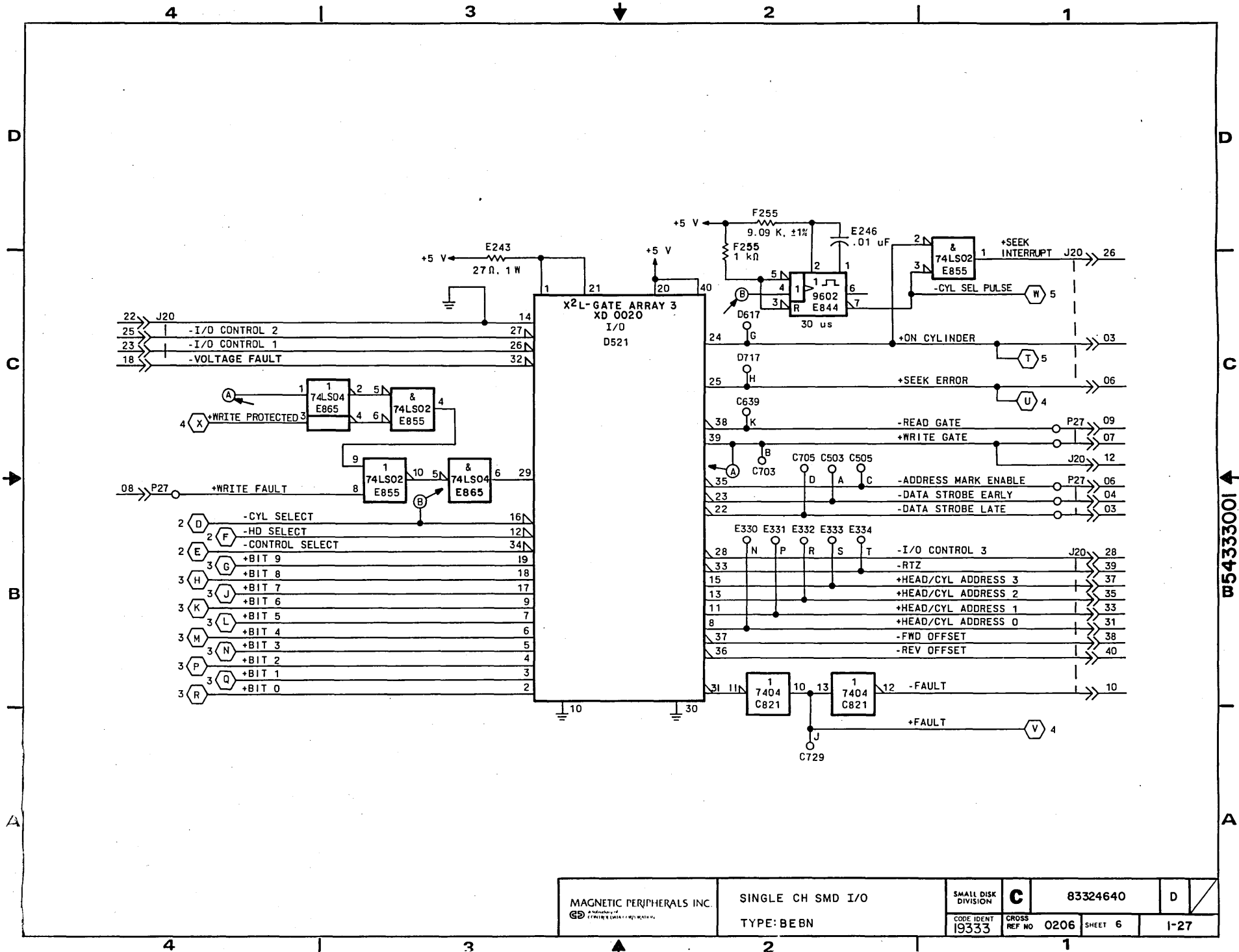
SIGNAL OUTPUTS

J20 >> 26 0406 J14-33
 J20 >> 03 0410 J14-19
 J20 >> 06 0410 J14-23
 P27 >> 09 0704* J27-09
 0757* J27-09
 P27 >> 07 0702* J27-07
 0752* J27-07
 J20 >> 12 0409 J14-26
 P27 >> 06 0704* J27-06
 0757* J27-06
 P27 >> 04 0705* J27-04
 0758* J27-04
 P27 >> 03 0705* J27-03
 0758* J27-03
 J20 >> 28 0406 J14-34
 J20 >> 39 0406 J14-01
 J20 >> 37 0406 J14-02
 J20 >> 35 0406 J14-03
 J20 >> 33 0406 J14-04
 J20 >> 31 0406 J14-05
 J20 >> 38 0418 J14-39
 J20 >> 40 0418 J14-40
 J20 >> 10 0406 J14-25

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0206	PAGE	1-26



MAGNETIC PERIPHERALS INC. A Division of GE	SINGLE CH SMD I/O TYPE: BEBN	SMALL DISK DIVISION	C	83324640	D
		CODE IDENT 19333	GROSS REF NO 0206	SHEET 6	1-27

W54333001

4 | 3 | 2 | 1

D

D

C

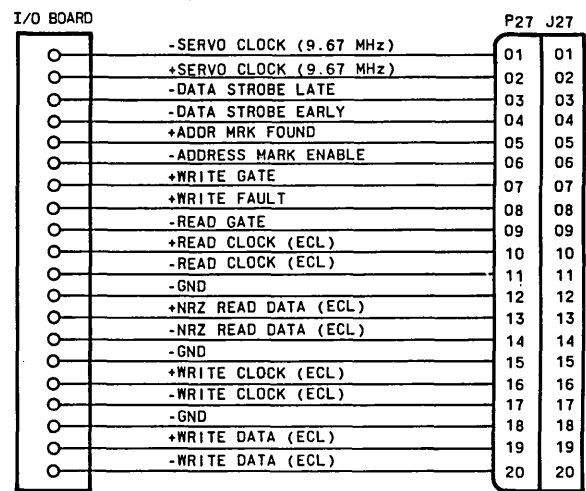
C

B

B

A

A



4 | 3 | 2 | 1

SIGNAL INPUTS

1002	P15-11	05	>>	J19
NC	-	07	>>	J19
1002	P15-01	08	>>	J19
1002	P15-02	03	>>	J19
NC	-	04	>>	J19
From Fan		02	>>	J48
1002	P15-03	01	>>	J19
NC	-	02	>>	J19
1002	P15-15	06	>>	J19
From Fan		04	>>	J48



SIGNAL OUTPUTS

J44	>>	04	NC	-
J44	>>	02	NC	-
J44	>>	06	NC	-
J44	>>	03	NC	-
J44	>>	01	NC	-
J44	>>	05	NC	-

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640		REV	H
CROSS REF NO	0201	PAGE	1-30		

UNUSED LOGIC ELEMENTS

TYPE	LOCATION	OUTPUT PINS
10125	C209	12, 1
7404	C821	8
74LS04	E865	10, 12
4049	D811	2, 6, 10, 15

UNUSED RESISTOR PACKS

VALUE	LOCATION	PINS
1 kΩ	E543	2, 5, 7
1 kΩ	E155	8
56 Ω	B944	6, 7, 8
470 Ω	C009	4, 5, 8
1 kΩ	D332	6, 7, 8
47 kΩ	E365	2, 4, 8
47 kΩ	C865	3, 4, 5

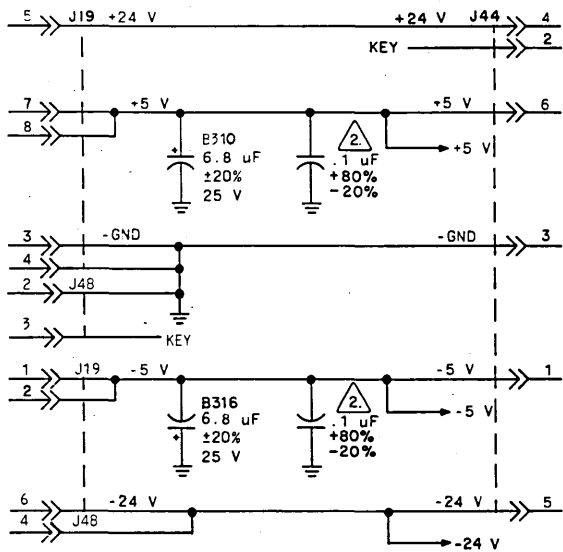
FILTER CAPS ²

.1 uF	
+5 V	-5 V
C721	B323
A525	C733
C021	C611
B333	E045
D257	A625
E658	C756
C633	E745
C711	D245
D225	D357
D945	D956
B233	B133
D165	C621
	C765

PART NO RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
02 THRU 02	A	DJ03000	RELEASED		1-3-83		
	B	DJ03278	SCH CHG'S	DLM	2-6-83	JL	CH
	C	DJ03319	ADD FAN FAULT GND	MJ	5-10-83		
	D	DJ03355	CORRECTION	MJ	9-12-83		
	E	DJ03392	CEBN → EEBN	MJ	9-12-83		
	F	DJ03474	RESISTOR CHANGES	FA	2-6-84		
	G	DJ03586	MOVE RESISTOR	JG	6-25-84		
	H	DJ03727	FEBN TO GEBN	SA	2-26-85		

NOTES:

- UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GND AND PIN 14 CONNECTED TO +5 V.
ALL DIODES, 15165580.
ALL TRANSISTORS, 2N3646, PNP, 50210310.
ALL RESISTOR PACK RESISTORS 1/8 W, ±3%.
- SEE TABLE FOR FILTER CAP LOCATIONS.
- J05 IS A/B CABLE JUMPER.
- DELAY TIME FOR REFERENCE ONLY.
- ALL ○—○ INDICATES MOLDED JUMPER WIRES.



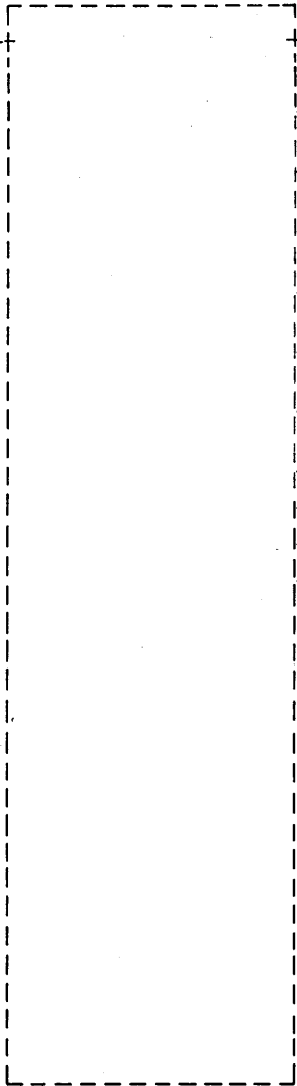
APPLIES TO SINGLE CHANNEL UNITS ONLY.

REFERENCE DRAWING		MAGNETIC PERIPHERALS INC.		TITLE	
COMP ASSY 54020502.		G.D. CONTROL DATA CORPORATION		SCHEMATIC DIAGRAM	
CTR 54020702.		FIRST USED ON	NEXT ASSEMBLY	SINGLE CH SMD I/O	
		PA3A1-A		TYPE C/E/FEBN	
COMPONENTS, EXCEPT AS NOTED		DWN	C. Semakula	11-2-82	SIZE
RES	TOLERANCE	VALUE	RATING	CHKD	DG Donat
	± 5%	OHMS	1/4W		12-7-82
CAP	±10%			ENGR	W.G. James
				MFG	2-7-82
				QA	M. Bault
					12-2-82
		TWIN CITIES DISK DIVISION		C 83324640 H	
		FSCM NO 19333		0201 SHEET 1 OF 7 PAGE 1-30.1	

54020602 A

SIGNAL INPUTS

0405 J14-10 21 ->> J20



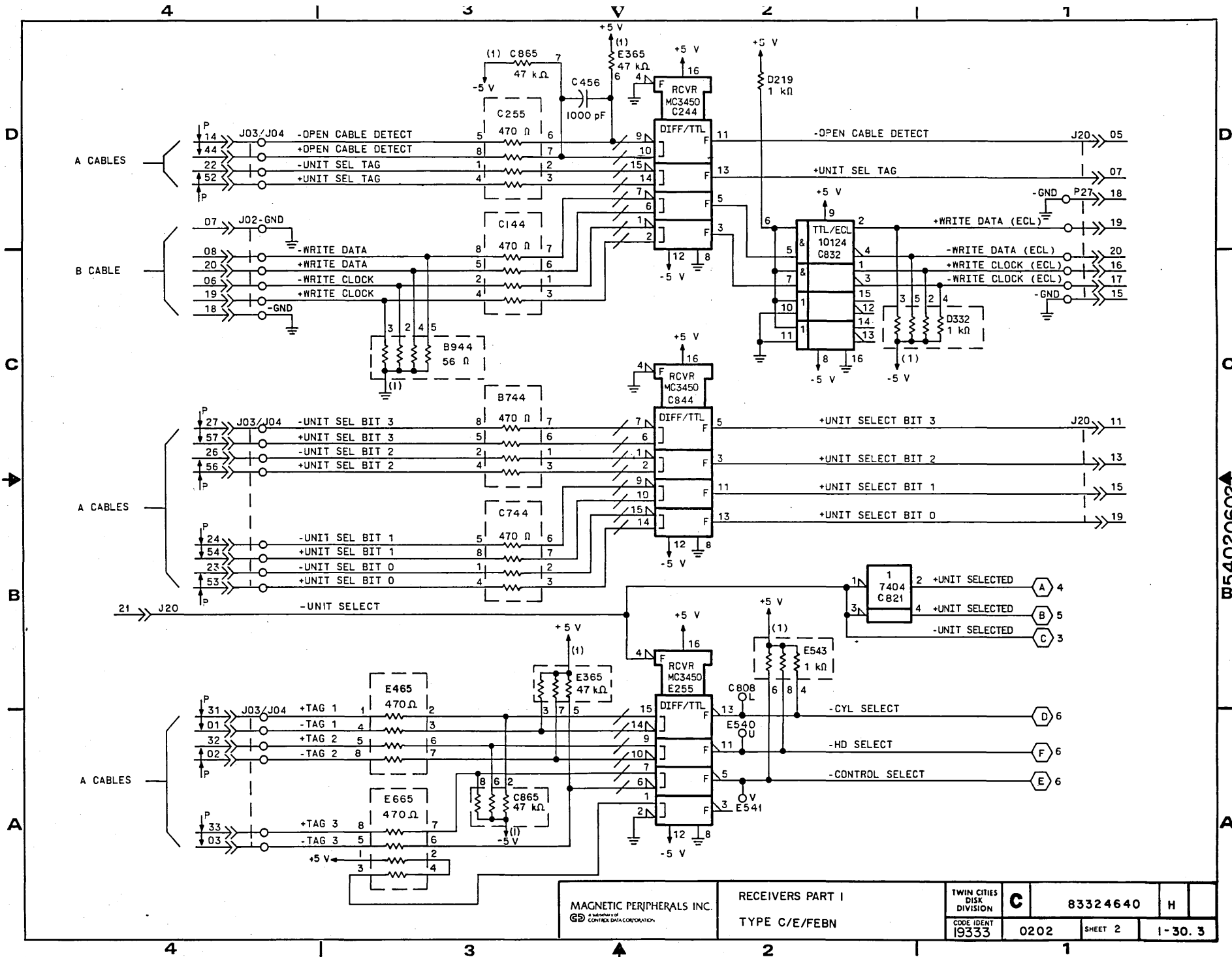
SIGNAL OUTPUTS

J20 >> 05	0405 J14-18
J20 >> 07	0405 J14-17
P27 >> 18	0701* J27-18
	0751* J27-18
P27 >> 19	0702* J27-19
	0752* J27-19
P27 >> 20	0702* J27-20
	0752* J27-20
P27 >> 16	0702* J27-16
	0752* J27-16
P27 >> 17	0702* J27-17
	0752* J27-17
P27 >> 15	0701* J27-15
	0751* J27-15
J20 >> 11	0405 J14-15
J20 >> 13	0405 J14-14
J20 >> 15	0405 J14-13
J20 >> 19	0405 J14-11

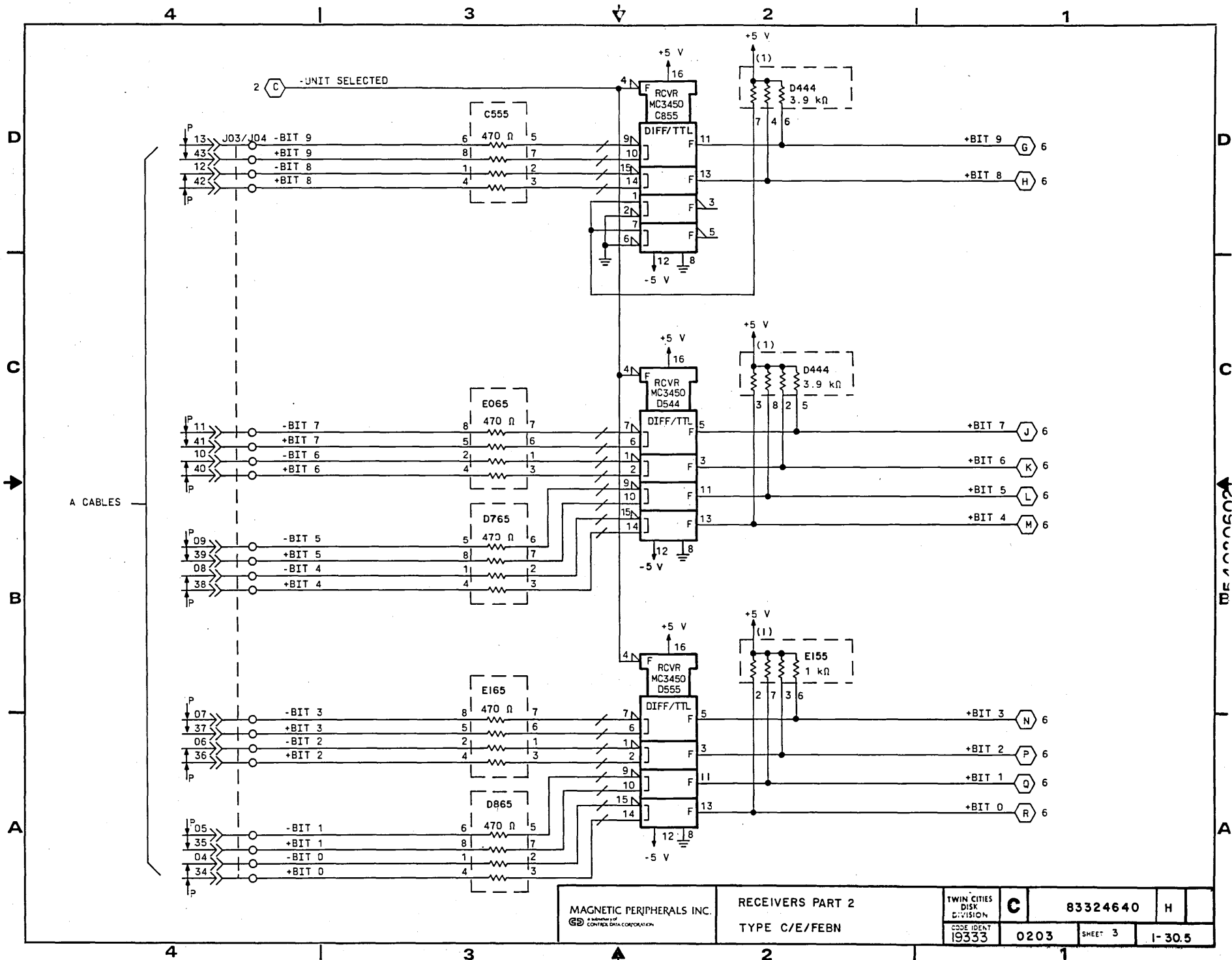
*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		REV	
83324640		H	
CROSS REF NO	PAGE		
0202	1-30.2		



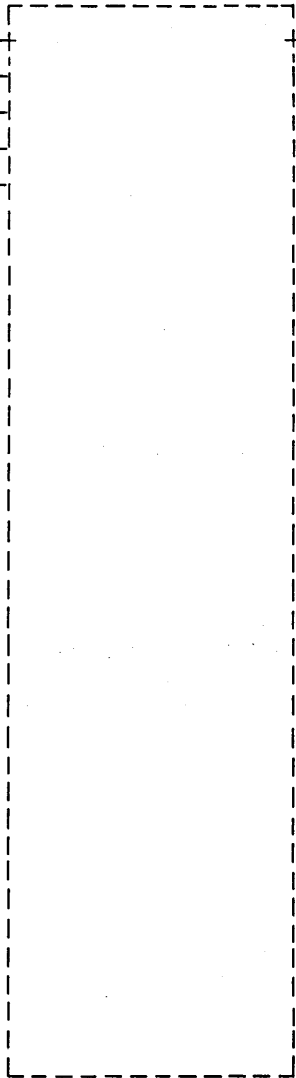
W54020602



SIGNAL INPUTS

0410	J14-20	01	>>	J20
0410	J14-35	30	>>	J20
0409	J14-24	08	>>	J20
0407	J14-12	17	>>	J20
0705*	J27-05	05	>>	P27
0758*	J27-05			

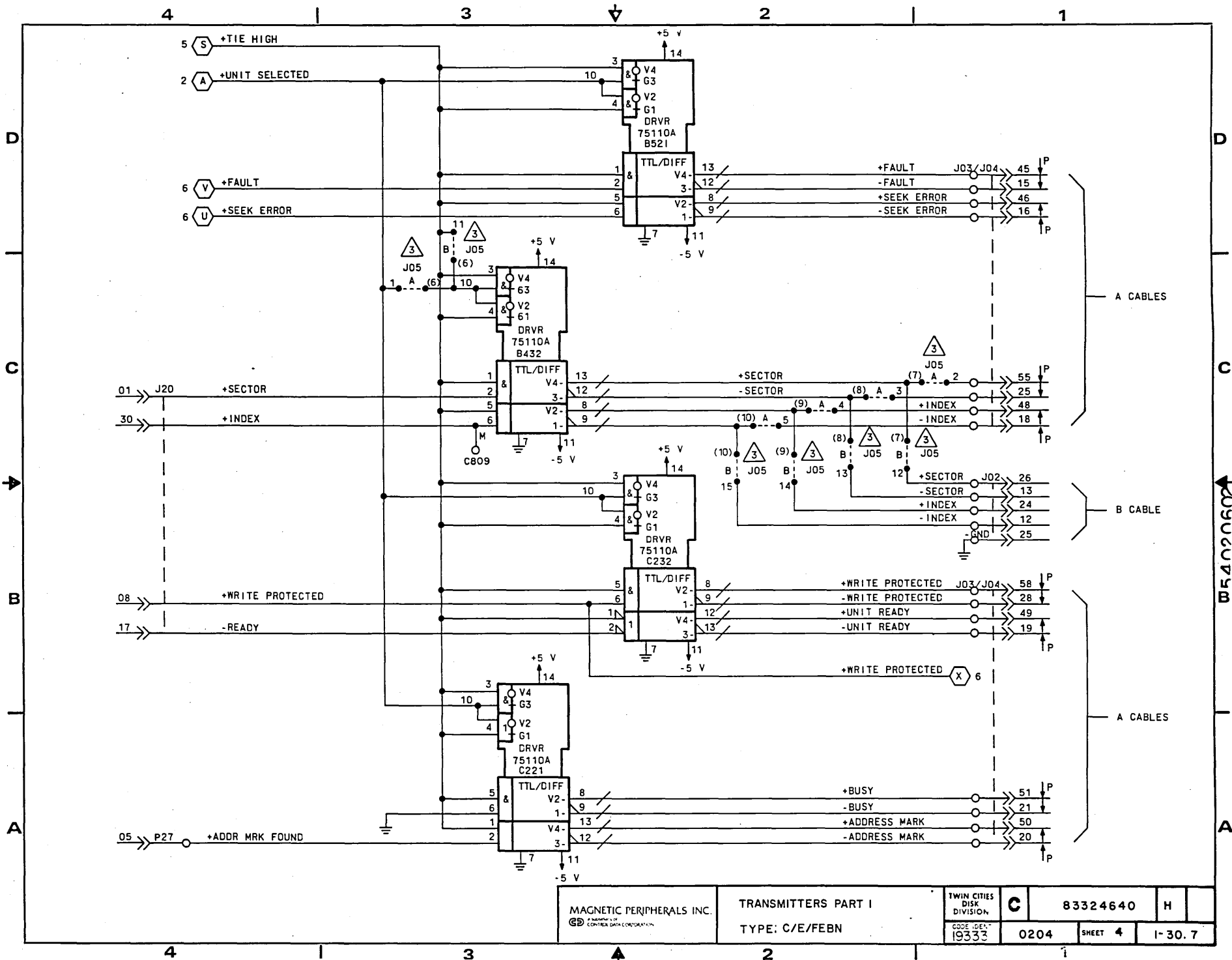
SIGNAL OUTPUTS



*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

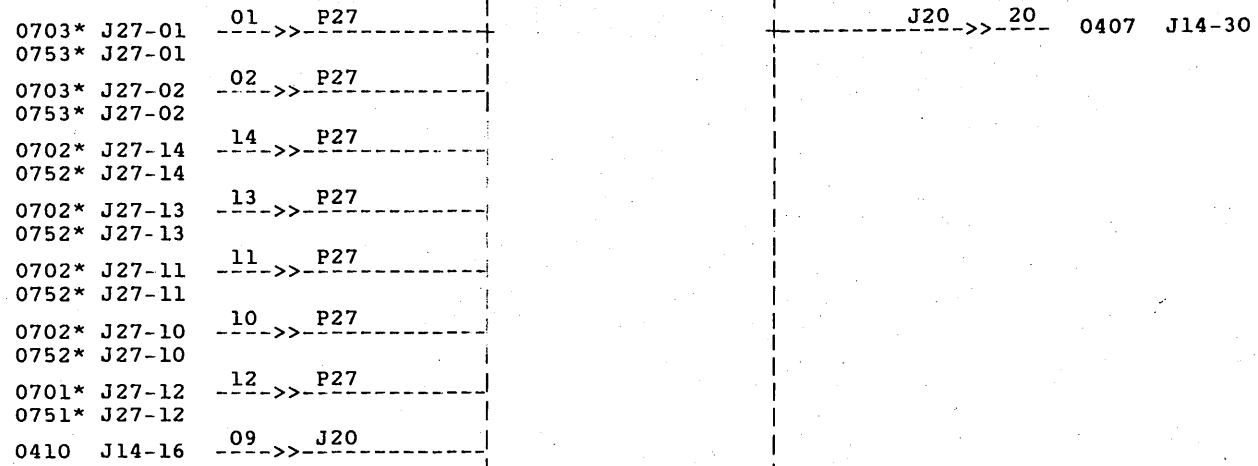
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0204	PAGE	1-30.6



SIGNAL INPUTS

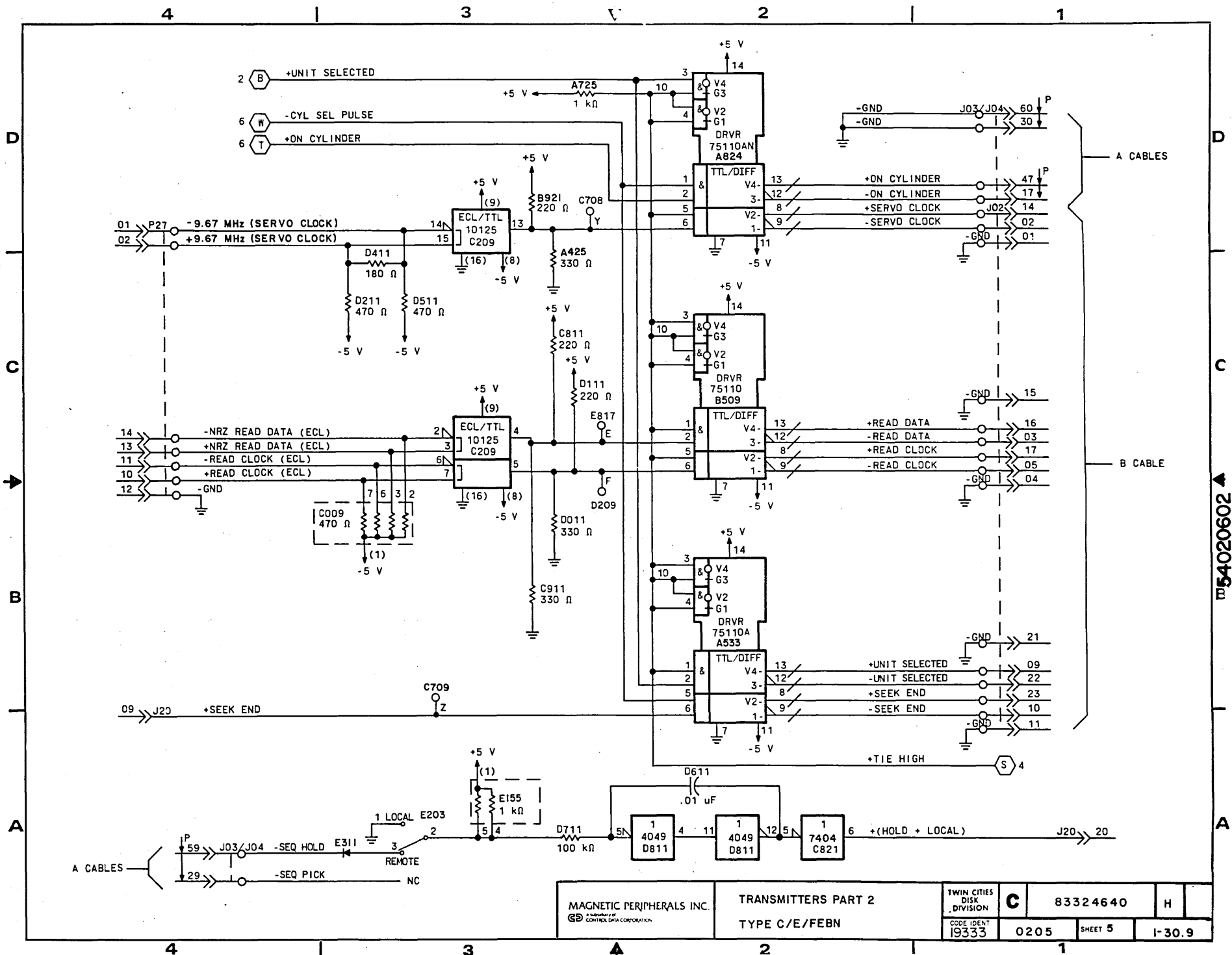
SIGNAL OUTPUTS



*070X and 08XX apply to drives with 2-board
 read/write (PFX/PGX)
 075X applies to drives with 1-board read/write
 (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		REV
83324640		H
CROSS REF NO	PAGE	
0205	1-30.8	

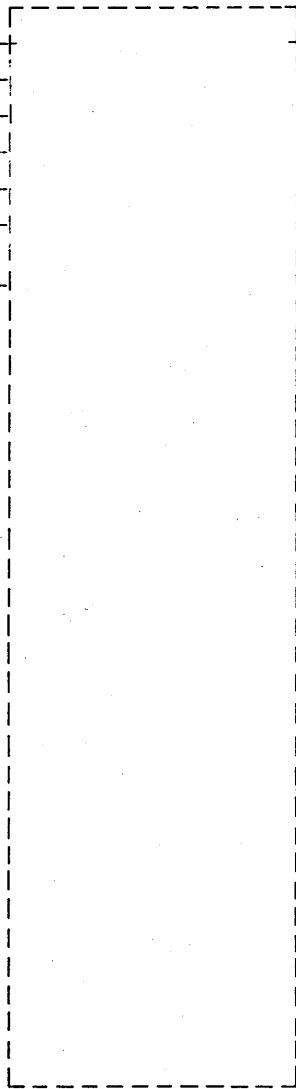


M54020602

MAGNETIC PERIPHERALS INC. A DIVISION OF CONTROL DATA CORPORATION	TRANSMITTERS PART 2		TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE C/E/FE2N		CODE IDENT 19333			

SIGNAL INPUTS

From Fan	01	>>	J48
0409 J14-31	22	>>	J20
0406 J14-08	25	>>	J20
0406 J14-09	23	>>	J20
0403 J14-29	18	>>	J20
0704* J27-08	08	>>	P27
0757* J27-08			
0404 J14-21	02	>>	J20



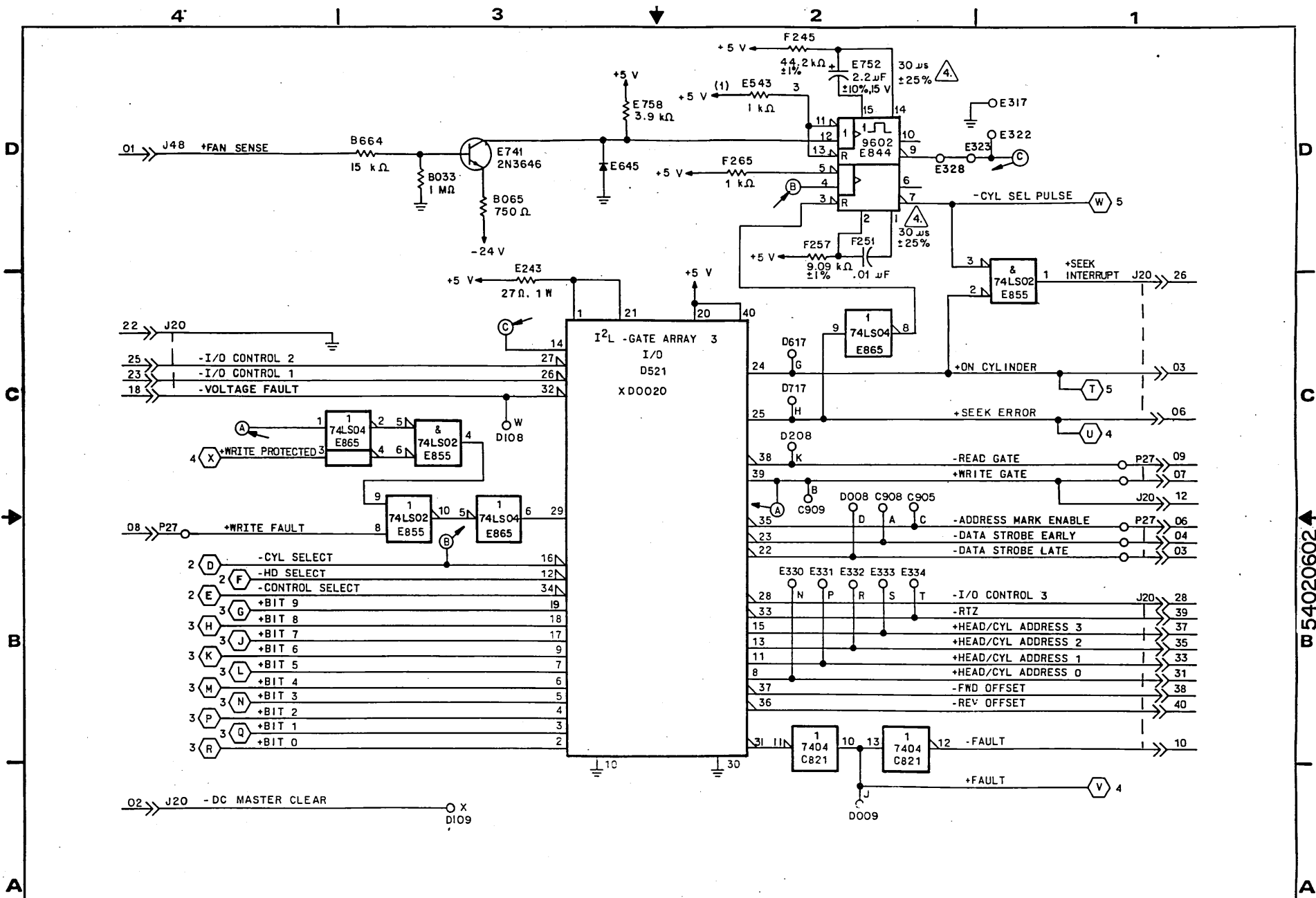
SIGNAL OUTPUTS

J20	>>	26	0406 J14-33
J20	>>	03	0410 J14-19
J20	>>	06	0410 J14-23
P27	>>	09	0704* J27-09
			0757* J27-09
P27	>>	07	0702* J27-07
			0752* J27-07
J20	>>	12	0409 J14-26
P27	>>	06	0704* J27-06
			0757* J27-06
P27	>>	04	0705* J27-04
			0758* J27-04
P27	>>	03	0705* J27-03
			0758* J27-03
J20	>>	28	0406 J14-34
J20	>>	39	0406 J14-01
J20	>>	37	0406 J14-02
J20	>>	35	0406 J14-03
J20	>>	33	0406 J14-04
J20	>>	31	0406 J14-05
J20	>>	38	0418 J14-39
J20	>>	40	0418 J14-40
J20	>>	10	0406 J14-25

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		REV	
83324640		H	
CROSS REF NO	PAGE		
0206	1-30.10		



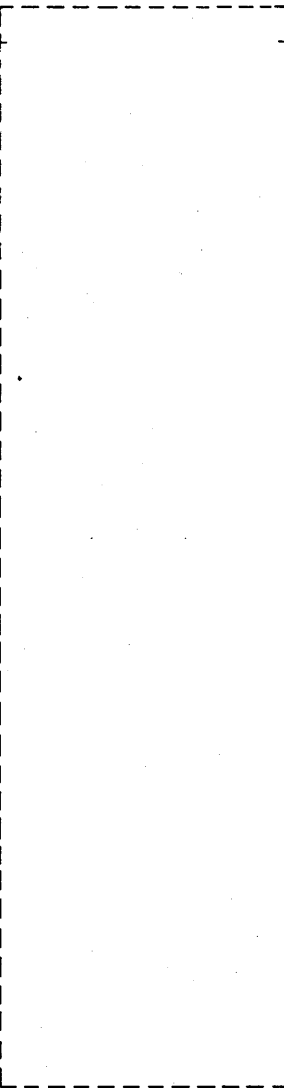
APPLIES TO CEBN BOARD ONLY.

MAGNETIC PERIPHERALS INC. <small>MEMBER OF CONTROL DATA CORPORATION</small>	SINGLE CH SMD I/O	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE CEBN	CODE IDENT 19333	0206	SHEET 6	I-30.11

W 54020602

SIGNAL INPUTS

From Fan	01	>>	J48
0409 J14-31	22	>>	J20
0406 J14-08	25	>>	J20
0406 J14-09	23	>>	J20
0403 J14-29	18	>>	J20
0704* J27-08	08	>>	P27
0757* J27-08			
0404 J14-21	02	>>	J20



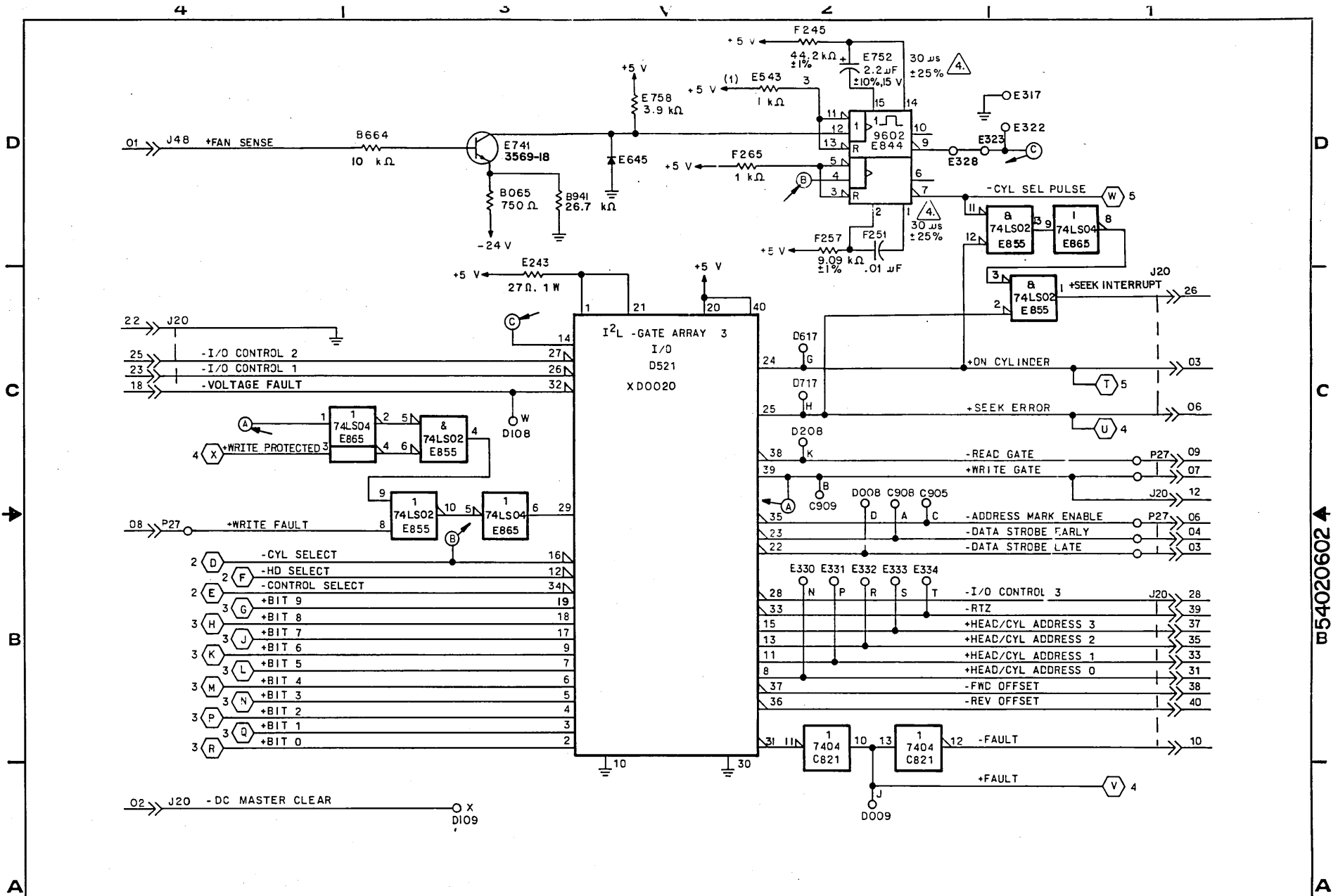
SIGNAL OUTPUTS

J20	>>	26	0406 J14-33
J20	>>	03	0410 J14-19
J20	>>	06	0410 J14-23
P27	>>	09	0704* J27-09
			0757* J27-09
P27	>>	07	0702* J27-07
			0752* J27-07
J20	>>	12	0409 J14-26
P27	>>	06	0704* J27-06
			0757* J27-06
P27	>>	04	0705* J27-04
			0758* J27-04
P27	>>	03	0705* J27-03
			0758* J27-03
J20	>>	28	0406 J14-34
J20	>>	39	0406 J14-01
J20	>>	37	0406 J14-02
J20	>>	35	0406 J14-03
J20	>>	33	0406 J14-04
J20	>>	31	0406 J14-05
J20	>>	38	0418 J14-39
J20	>>	40	0418 J14-40
J20	>>	10	0406 J14-25

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		REV
83324640		H
CROSS REF NO	PAGE	
0206	1-30,12	



APPLIES TO EEBN/FEBN BOARDS ONLY

MAGNETIC PERIPHERALS INC. A DIVISION OF CENTRIX DATA CORPORATION	SINGLE CH SMD I/O	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE E/FEBN	CODE IDENT 19333			

B54020602 4

4

3

V

2

1

D

D

C

C

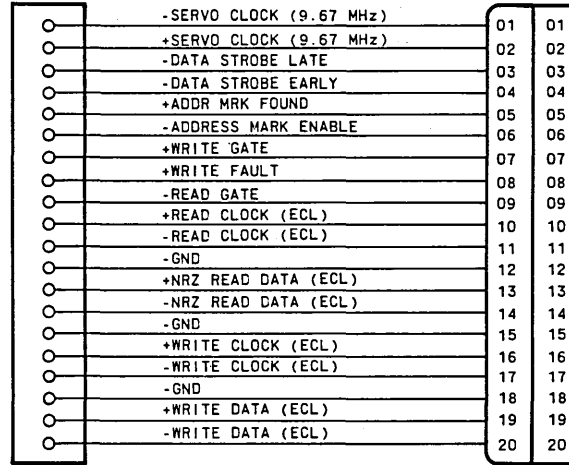
B

B

A

A

I/O BOARD



MAGNETIC PERIPHERALS INC. <small>MEMBER OF CONTROL DATA CORPORATION</small>	I/O TO R/W PLO'S TRAILING CABLE TYPE: C/E/FEBN		TWIN CITIES DISK DIVISION	C	8332 4640	H	
	CODE IDENT 19333	0207	SHEET 7	1-30.15			

4

3

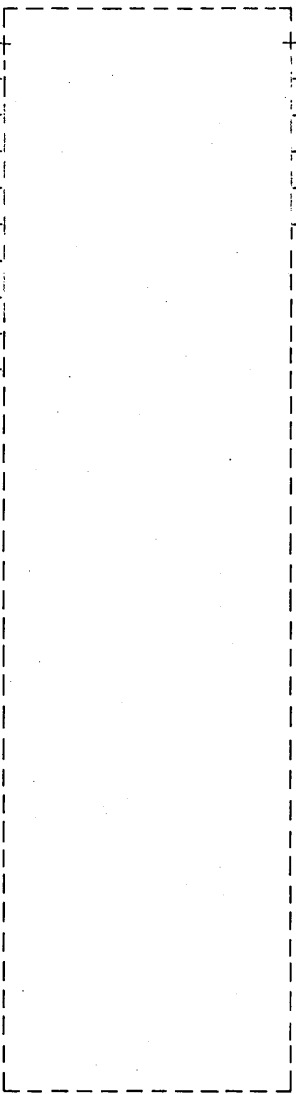
A

2

1

SIGNAL INPUTS

1002	P15-11	05	>>	J19
NC	-	07	>>	J19
1002	P15-01	08	>>	J19
1002	P15-02	03	>>	J19
NC	-	04	>>	J19
From Fan		02	>>	J48
1002	P15-03	01	>>	J19
NC	-	02	>>	J19
1002	P15-15	06	>>	J19
From Fan		04	>>	J48



SIGNAL OUTPUTS

J44	>>	04	NC	-
J44	>>	02	NC	-
J44	>>	06	NC	-
J44	>>	03	NC	-
J44	>>	01	NC	-
J44	>>	05	NC	-

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0201	PAGE	1-30,16

UNUSED LOGIC ELEMENTS

TYPE	LOCATION	OUTPUT PINS
10125	C509	12,1
7404	D120	8
74LS04	D820	8,10,12
4049	E141	2,6,10,15

UNUSED RESISTOR PACKS

VALUE	LOCATION	PINS
1 k Ω	E651	2,5,7
1 k Ω	D941	8
56 Ω	D951	6,7,8
470 Ω	C309	4,5,8
1 k Ω	C209	6,7,8
47 k Ω	E862	2,4,8
47 k Ω	D762	3,4,5

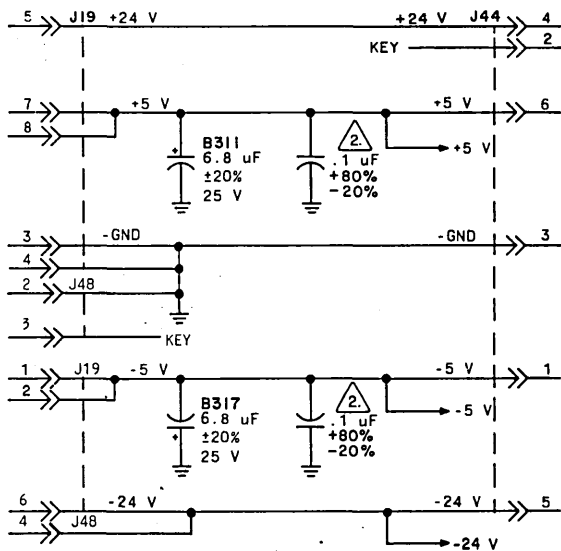
FILTER CAPS ²

.1 uF	
+5 V	-5 V
B470	B818
B828	B838
E648	B459
C159	C170
C518	C528
C538	C548
D818	D059
D970	D070
E139	D118
E859	D959

PART NO RANGE ⁶	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRAFT	DATE	CHKD	APP
10 THRU 10	A	DJ23000 DJ03851	CLASS A RELEASE BY ECO	DLS	5-30-85	<i>[Signature]</i>	<i>[Signature]</i>

NOTES:

- UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GND AND PIN 14 CONNECTED TO +5 V.
ALL DIODES, 15165580.
ALL TRANSISTORS, 2N3646, PNP, 50210310.
ALL RESISTOR PACK RESISTORS 1/8 W. $\pm 3\%$
- SEE TABLE FOR FILTER CAP LOCATIONS.
- DELAY TIME FOR REFERENCE ONLY.
- ALL \bigcirc - \bigcirc INDICATES MOLDED JUMPER WIRES.
- DRAWINGS WHERE TAB NUMBERS CREATE NEW COVER SHEET, TABS 00-99 ARE RESERVED.

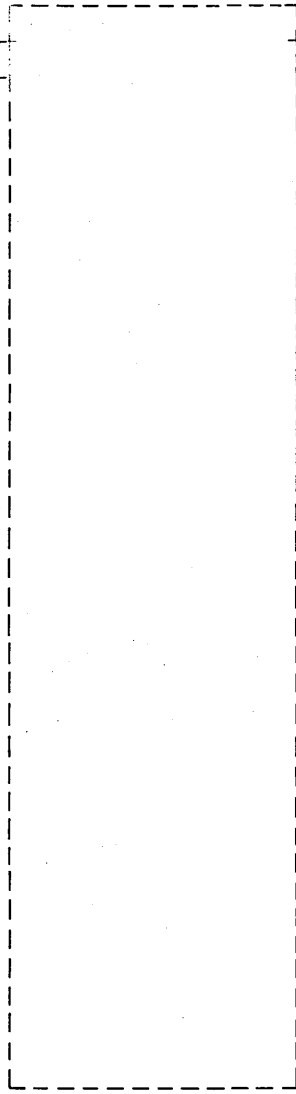


REFERENCE DRAWING				MAGNETIC PERIPHERALS INC.		TITLE	
COMP ASSY 54020510				a subsidiary of G.D. CONTROL DATA CORPORATION		SCHEMATIC DIAGRAM	
CTR 54020710				FIRST USED ON	NEXT ASSEMBLY	SINGLE CH SMD I/O	
				PA3A1-A		TYPE GEBN/KEBN	
COMPONENTS, EXCEPT AS NOTED				DWN	<i>David A. Dicks</i>	5-30-85	
TOLERANCE	VALUE	RATING	CHKD	<i>Ken A. Owen</i>	6-17-85	TWIN CITIES DISK DIVISION	SIZE C
RES $\pm 5\%$	OHMS	1/4W	ENGR	M. RIPLEY	5-30-85	83324640	H
CAP $\pm 10\%$			MFG				
			UA				
FSCM NO 19333		0201		SHEET 1 OF 8		PAGE 1-30.17	

W54020610

SIGNAL INPUTS

0402 J14-38 36 >> J20
 0405 J14-10 21 >> J20



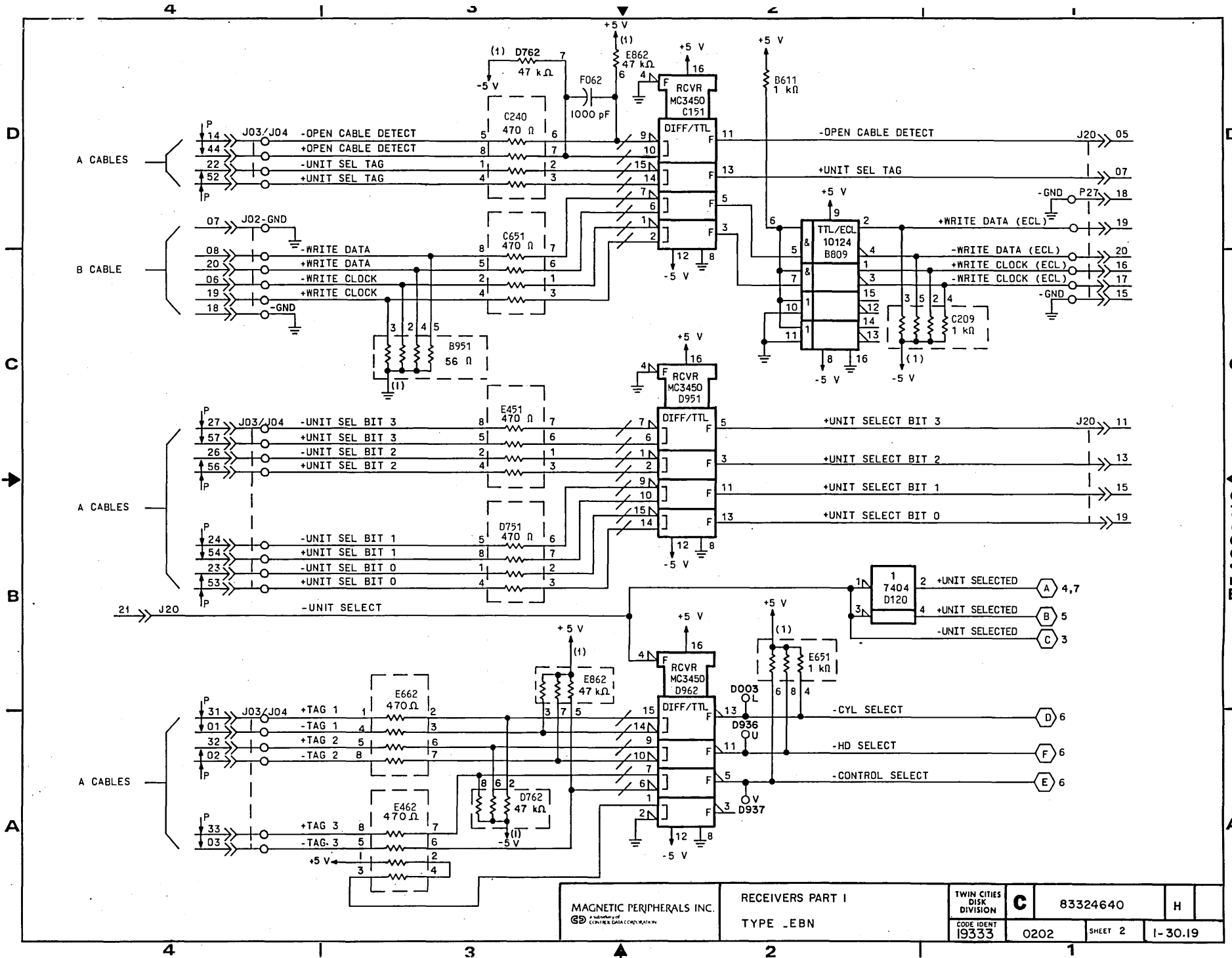
SIGNAL OUTPUTS

J20 >> 05 0405 J14-18
 J20 >> 07 0405 J14-17
 P27 >> 18 0701* J27-18
 0751* J27-18
 P27 >> 19 0702* J27-19
 0752* J27-19
 P27 >> 20 0702* J27-20
 0752* J27-20
 P27 >> 16 0702* J27-16
 0752* J27-16
 P27 >> 17 0702* J27-17
 0752* J27-17
 P27 >> 15 0701* J27-15
 0751* J27-15
 J20 >> 11 0405 J14-15
 J20 >> 13 0405 J14-14
 J20 >> 15 0405 J14-13
 J20 >> 19 0405 J14-11

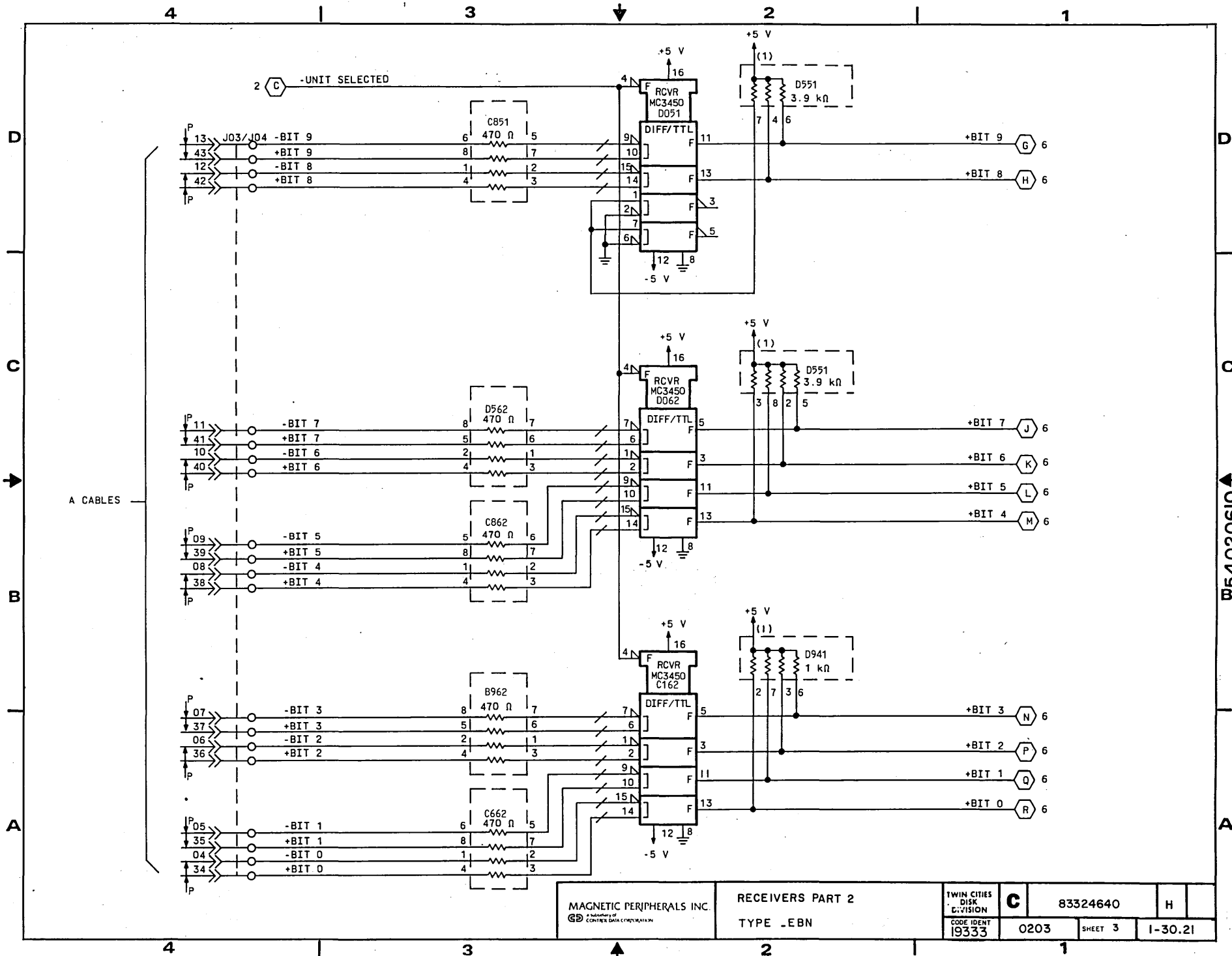
*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0202	PAGE 1-30.18	



W54020610



MAGNETIC PERIPHERALS INC.
GE A MEMBER OF
 CONTROL DATA CORPORATION

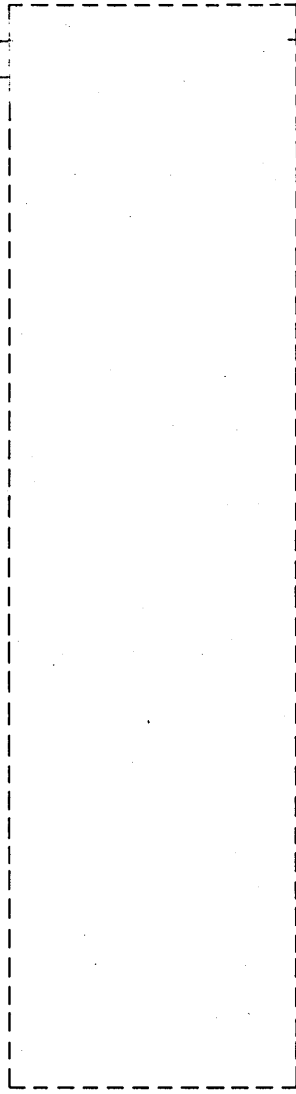
RECEIVERS PART 2
 TYPE -LEBN

TWIN CITIES DISK DIVISION	C	83324640	H
CODE IDENT 19333	0203	SHEET 3	I-30.21

W54020610

SIGNAL INPUTS

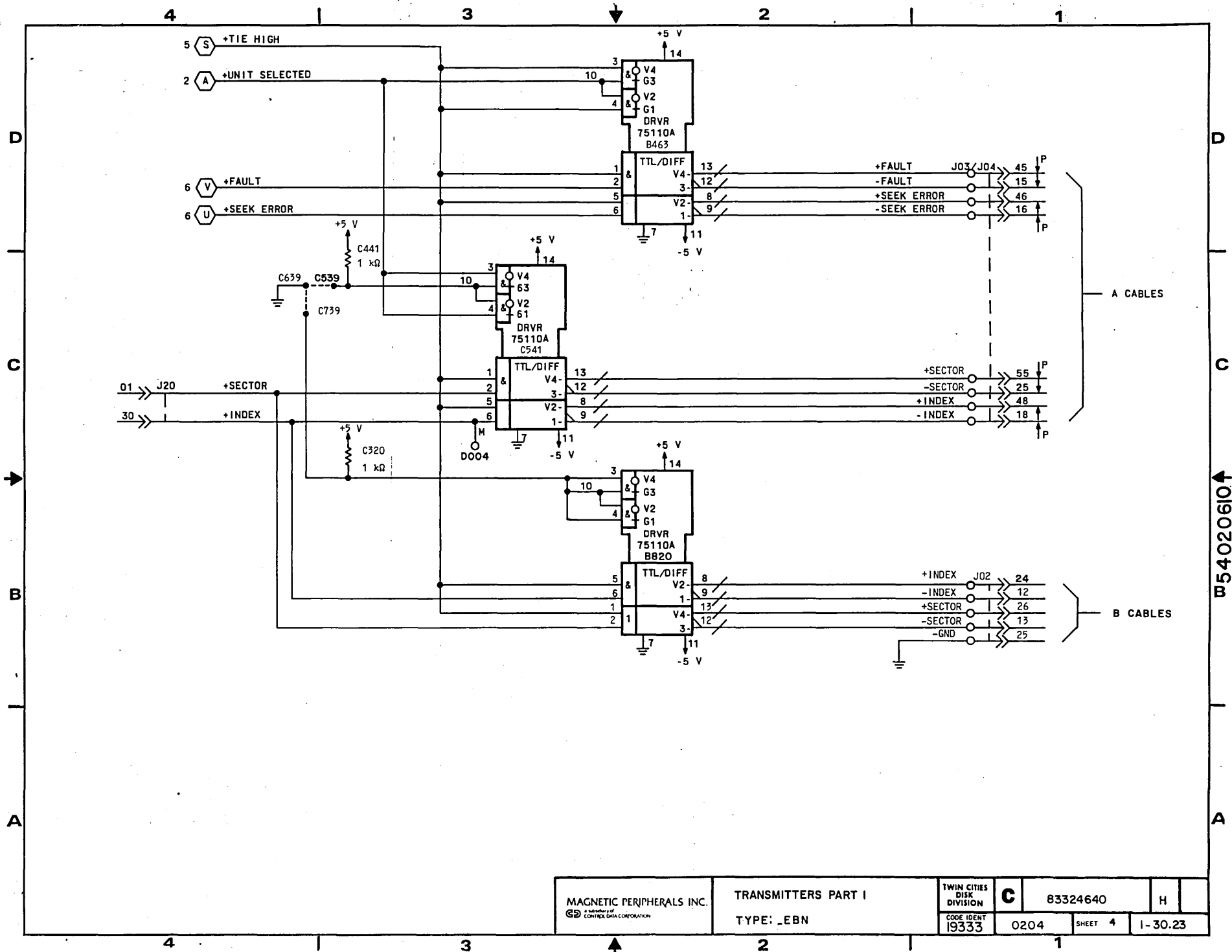
0410 J14-20 01 >> J20
0410 J14-35 30 >> J20



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

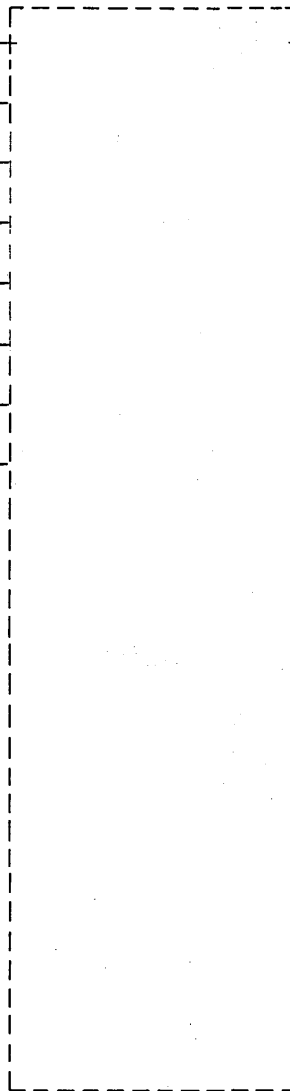
PUB		REV	
83324640		H	
CROSS REF NO	0204	PAGE	1-30.22



W54020610

SIGNAL INPUTS

0703* J27-01 01 >> P27
 0753* J27-01
 0703* J27-02 02 >> P27
 0753* J27-02
 0702* J27-14 14 >> P27
 0752* J27-14
 0702* J27-13 13 >> P27
 0752* J27-13
 0702* J27-11 11 >> P27
 0752* J27-11
 0702* J27-10 10 >> P27
 0752* J27-10
 0701* J27-12 12 >> P27
 0751* J27-12
 0410 J14-16 09 >> J20



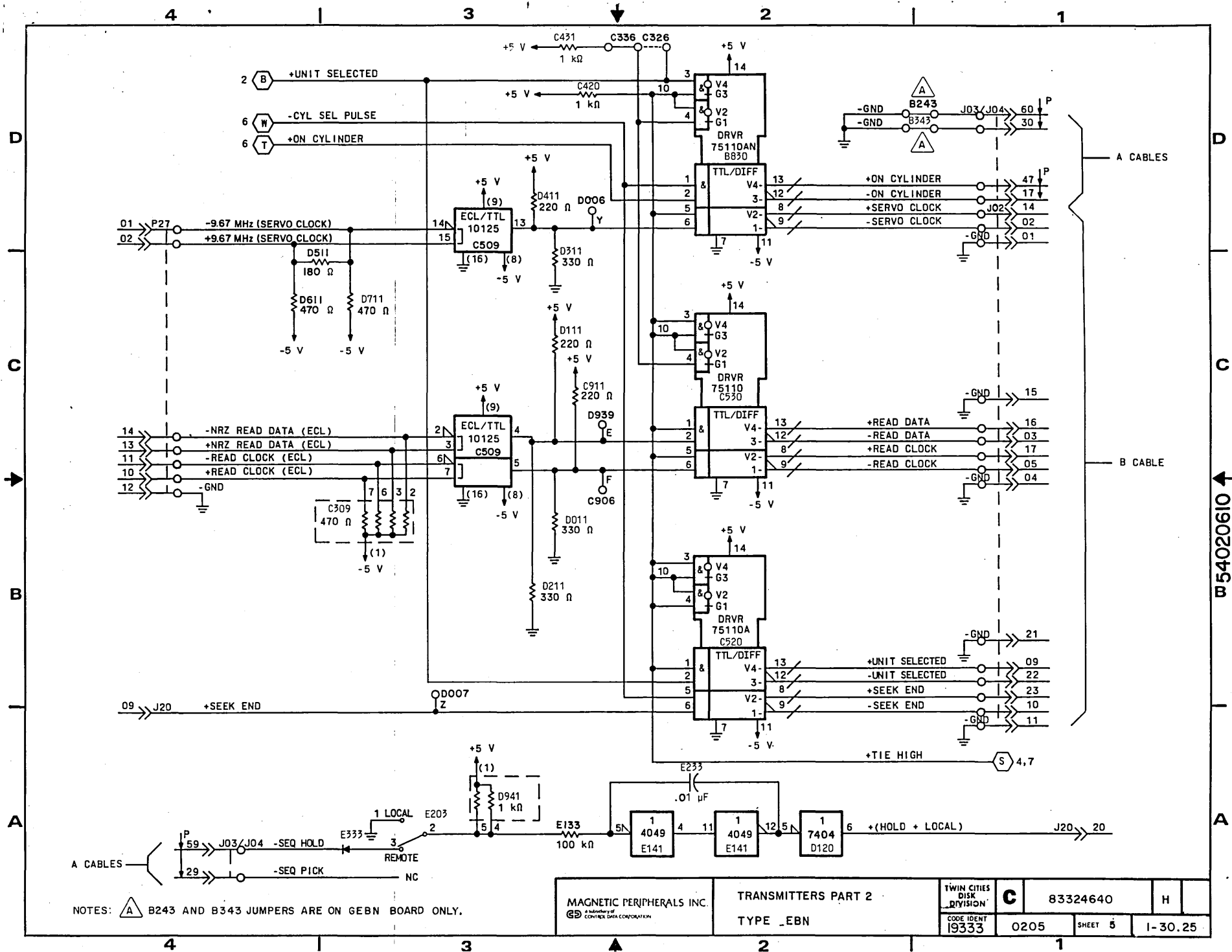
SIGNAL OUTPUTS

J20 >> 20 0407 J14-30

*070X and 08XX apply to drives with 2-board
 read/write (PFX/PGX)
 075X applies to drives with 1-board read/write
 (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0205	PAGE 1-30.24	



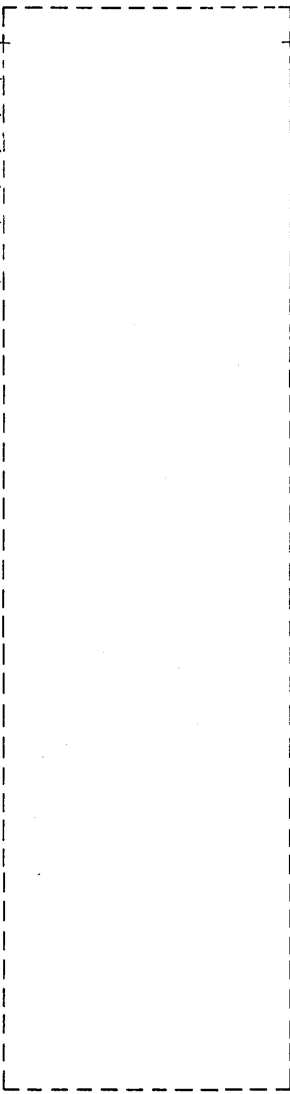
NOTES: Δ B243 AND B343 JUMPERS ARE ON GEBN BOARD ONLY.

MAGNETIC PERIPHERALS INC. CONTRACT DATA CORPORATION	TRANSMITTERS PART 2	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE_EBN	CODE IDENT 19333	0205	SHEET 5	1-30.25

W54020610

SIGNAL INPUTS

From Fan	01	>>	J48
0409 J14-31	22	>>	J20
0406 J14-08	25	>>	J20
0406 J14-09	23	>>	J20
0403 J14-29	18	>>	J20
0704* J27-08	08	>>	P27
0757* J27-08			
0404 J14-21	02	>>	J20



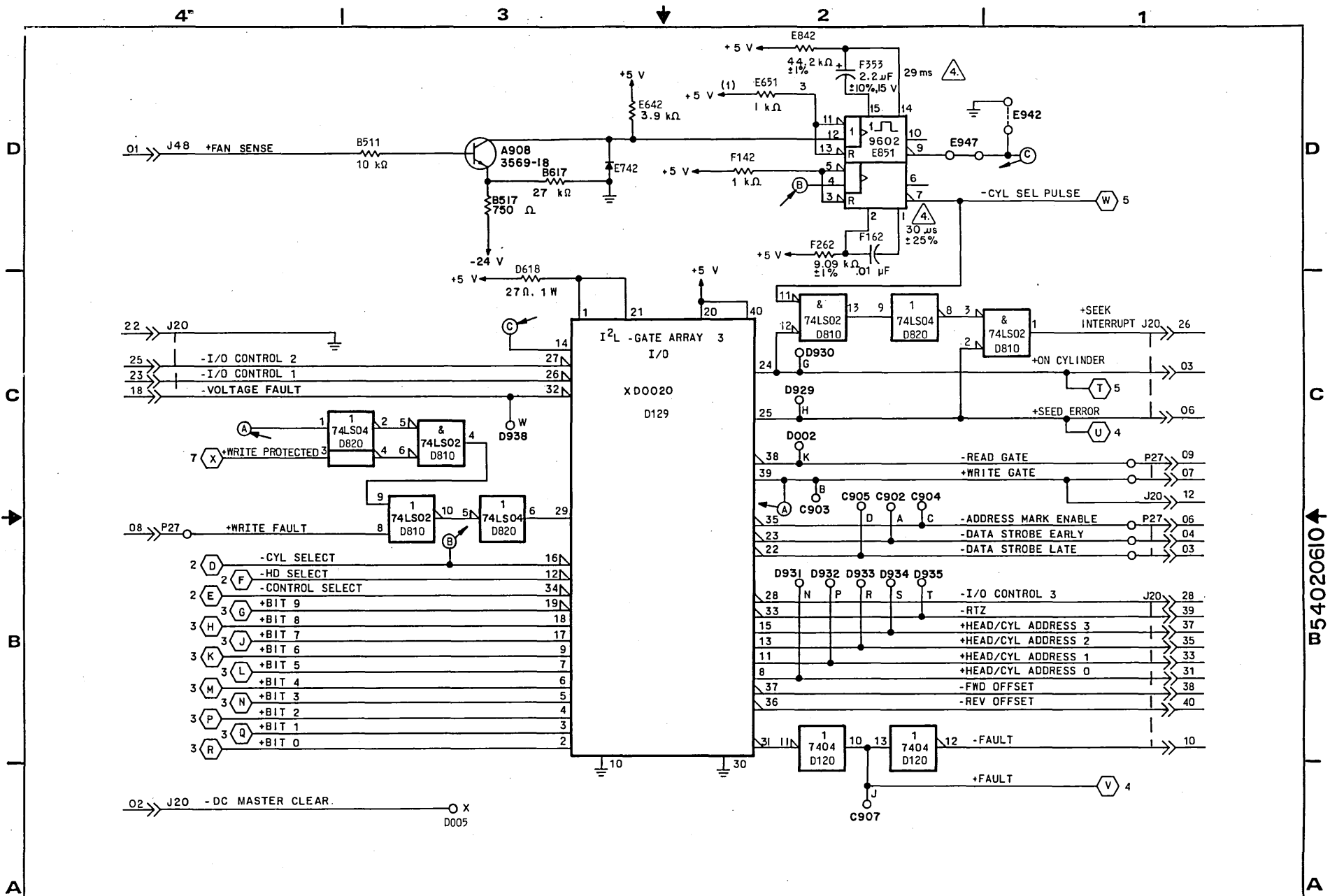
SIGNAL OUTPUTS

J20	>>	26	0406	J14-33
J20	>>	03	0410	J14-19
J20	>>	06	0410	J14-23
P27	>>	09	0704*	J27-09
			0757*	J27-09
P27	>>	07	0702*	J27-07
			0752*	J27-07
J20	>>	12	0409	J14-26
P27	>>	06	0704*	J27-06
			0757*	J27-06
P27	>>	04	0705*	J27-04
			0758*	J27-04
P27	>>	03	0705*	J27-03
			0758*	J27-03
J20	>>	28	0406	J14-34
J20	>>	39	0406	J14-01
J20	>>	37	0406	J14-02
J20	>>	35	0406	J14-03
J20	>>	33	0406	J14-04
J20	>>	31	0406	J14-05
J20	>>	38	0418	J14-39
J20	>>	40	0418	J14-40
J20	>>	10	0406	J14-25

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640	REV	H
CROSS REF NO	0206	PAGE	1-30.26	

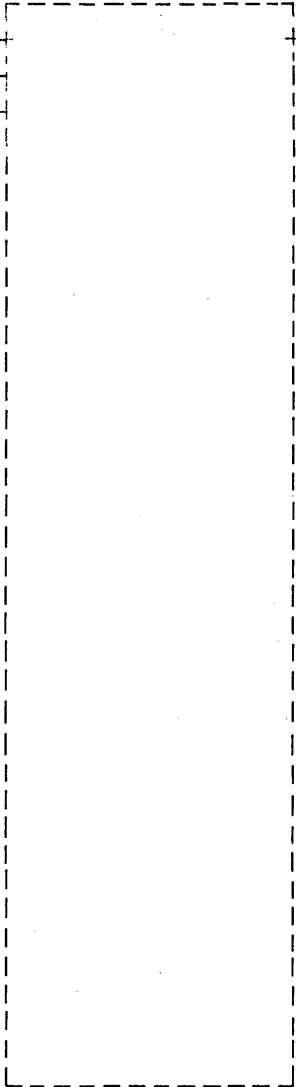


MAGNETIC PERIPHERALS INC. A DIVISION OF CONTINENTAL DATA SYSTEMS	SINGLE CH SMD I/O	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE _EBN	CODE IDENT 19333			

B54020610

SIGNAL INPUTS

0409 J14-24 08 >> J20
0407 J14-12 17 >> J20
0705* J27-05 05 >> P27
0758* J27-05

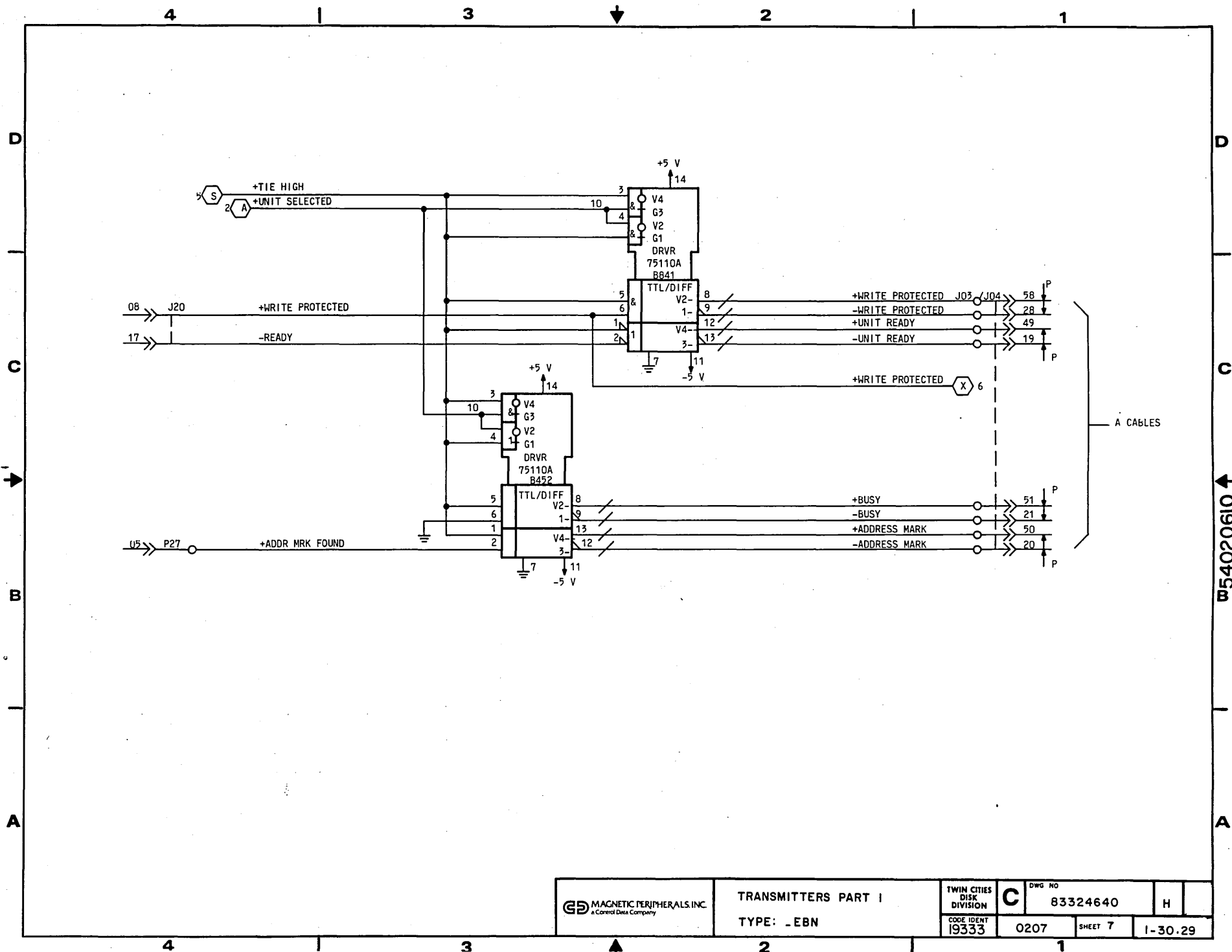


SIGNAL OUTPUTS

*070X and 08XX apply to drives with 2-board
read/write (PFX/PGX)
075X applies to drives with 1-board read/write
(RUX)

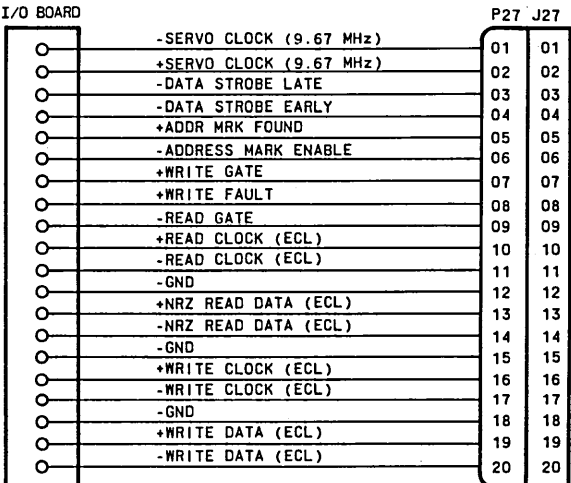
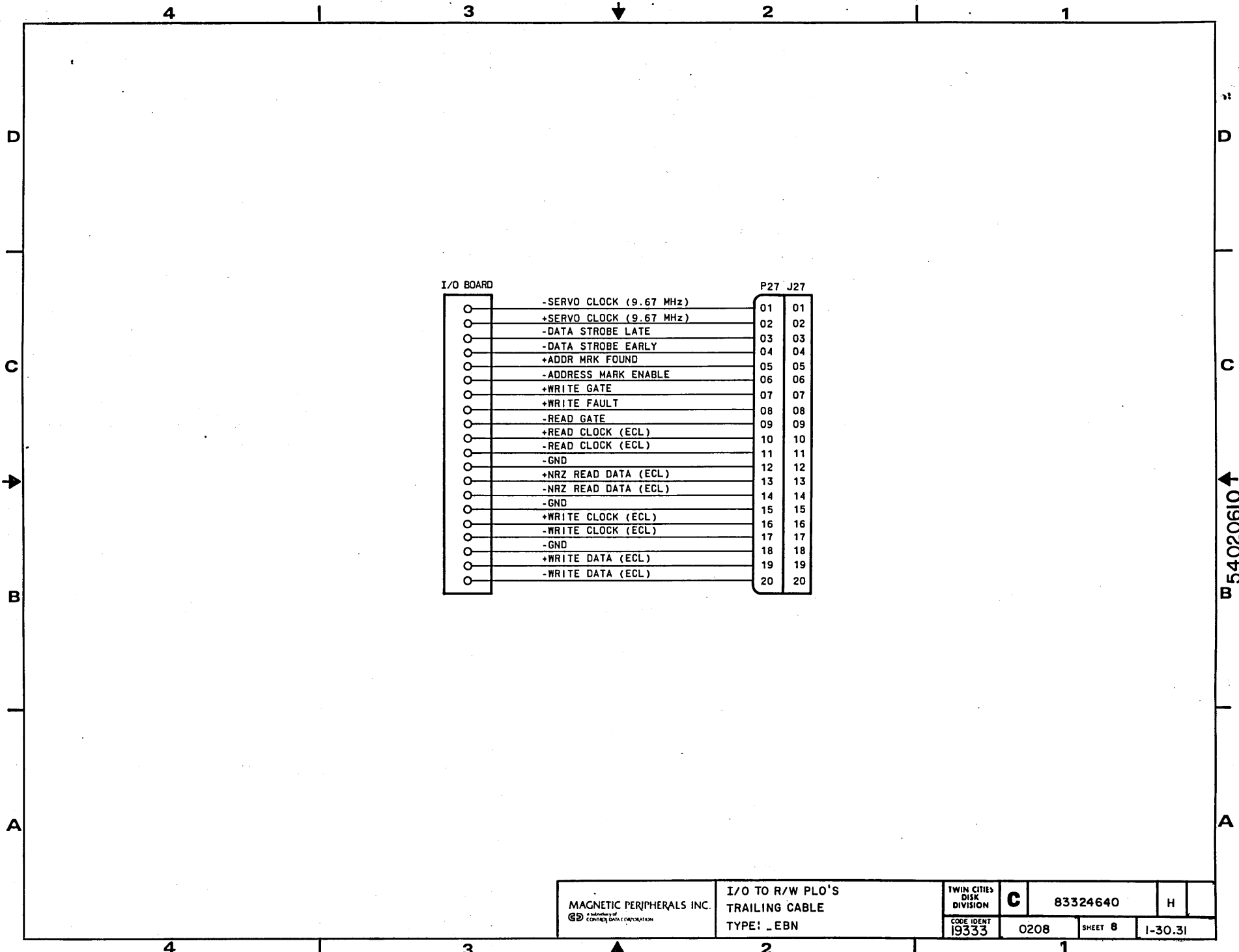
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0207	PAGE	1-30.28



MAGNETIC PERIPHERALS, INC. <small>a Control Data Company</small>	TRANSMITTERS PART I TYPE: _EBN		TWIN CITIES DISK DIVISION	DWG NO C 83324640	H
	CODE IDENT 19333	0207	SHEET 7	1-30-29	

W54020610

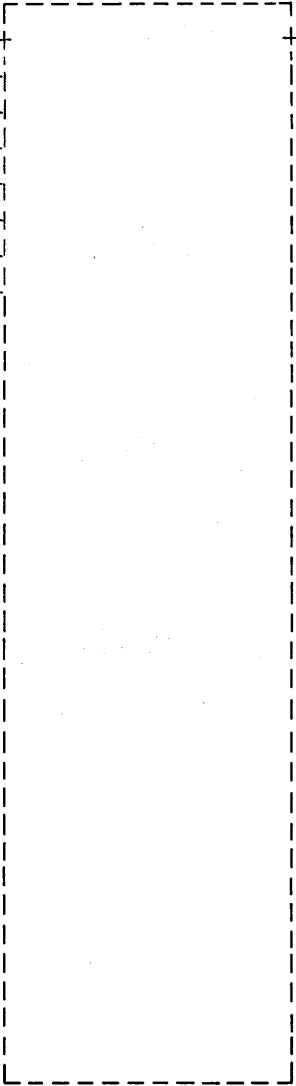


B 54020610

MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> GE CONTROLS DATA CORPORATION	I/O TO R/W PLO'S TRAILING CABLE		TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE: _ EBN		CODE IDENT 19333			

SIGNAL INPUTS

1002	P15-11	05	>>	J19	-
NC	-	07	>>	J19	-
1002	P15-01	08	>>	J19	-
1002	P15-02	03	>>	J19	-
NC	-	04	>>	J19	-
1002	P15-03	01	>>	J19	-
NC	-	02	>>	J19	-
1002	P15-15	06	>>	J19	-



SIGNAL OUTPUTS

J44	>>	04	NC	-
J44	>>	06	NC	-
J44	>>	03	NC	-
J44	>>	01	NC	-
J44	>>	05	NC	-

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0201	PAGE 1-30.32	

UNUSED LOGIC ELEMENTS		
ELEMENT	LOCATION	OUTPUT PINS
10125	C510	4
4049	K153	10, 12, 15

FILTER CAPS	
.1 μ F	
+5 V	-5 V
B710	A732
C920	B722
E111	D611
E264	D621
E732	E142
E821	E231
E842	E864
F453	F411
F931	F421
G022	G031
G064	G042
G642	G664
H253	J342
H732	
H764	
J938	
J944	
K653	
K764	

PART NO. RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
00 THRU 00	A	DJ23000	RELEASED		5-4-83		CSH
	E	DJ03431	CORRECTION		9-12-83		
	C	DJ03547	CORRECTIONS	JG	6-25-84		
	D	DJ03791	IMPROVE FAN FAULT CIRCUITRY	CB	5-2-86		
	E	DJ28030	CHANGE DELAY TIME	CB	5-2-86		

1. UNLESS OTHERWISE SPECIFIED:

ALL 16 PIN IC'S HAVE PIN 8 CONNECTED TO GROUND AND PIN 16 CONNECTED TO +5 V.

ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GROUND AND PIN 14 CONNECTED TO +5 V.

ALL DIODES 15165580.

ALL TRANSISTORS, PNP, 2N3646, 50210310.

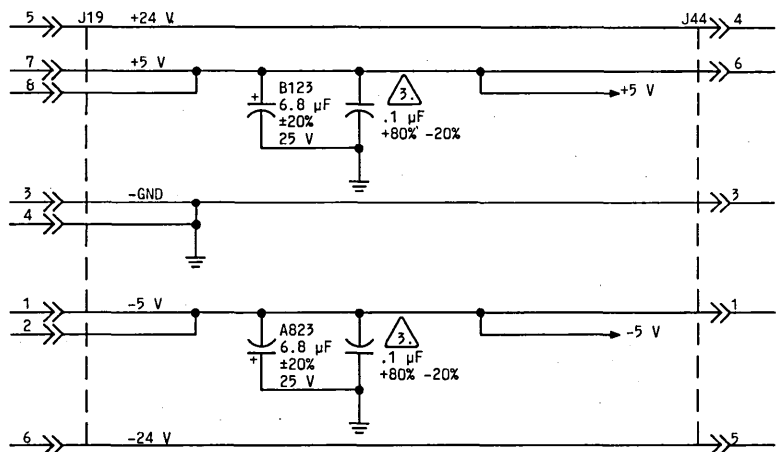
ALL RESISTOR PACK RESISTORS, 1/8 W, \pm 3%.

ALL \bigcirc - \bigcirc INDICATES MOLDED JUMPER WIRES.

2. DELAY TIME FOR REFERENCE ONLY.

3. SEE TABLE FOR .1 μ F FILTER CAPACITOR LOCATIONS.

4. J05 AND J06 ARE A/B CABLE JUMPER.



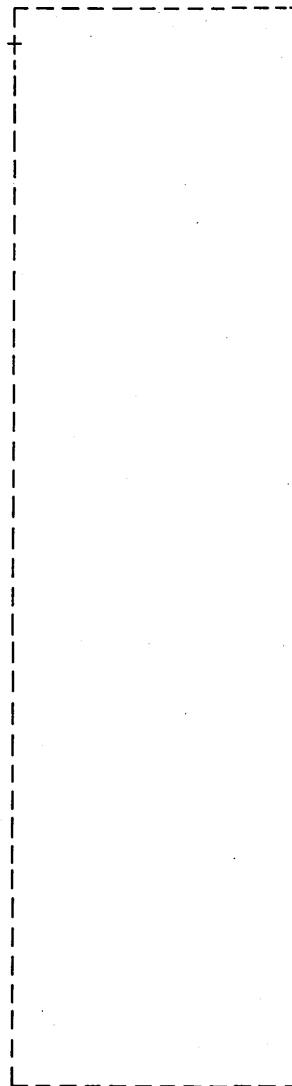
APPLIES TO DUAL CHANNEL UNITS ONLY.

REFERENCE DRAWING COMP ASSY. 54021300				MAGNETIC PERIPHERALS, INC. a Control Data Company		TITLE SCHEMATIC DIAGRAM DUAL CH SMD I/O TYPE AEDN/CEDN	
CTR. 54021500				FIRST USED ON PASAI-A, PASAI-A		NEXT ASSEMBLY	
COMPONENTS, EXCEPT AS NOTED				DWN	F.A.	1/26/83	
RES	TOLERANCE	VALUE	RATING	CHKD	DG-Donnet	3-17-83	
	\pm 5%	OHMS	1/4W	ENGR	J. Heitling	3-18-83	
CAP	\pm 10%			MFG	J. Brandt	4-28-83	
				QA	M. K. ...	7-27-83	
				FSCM NO. 19333		0201	
				SHEET 1 OF 13		1-31	

W54021400

SIGNAL INPUTS

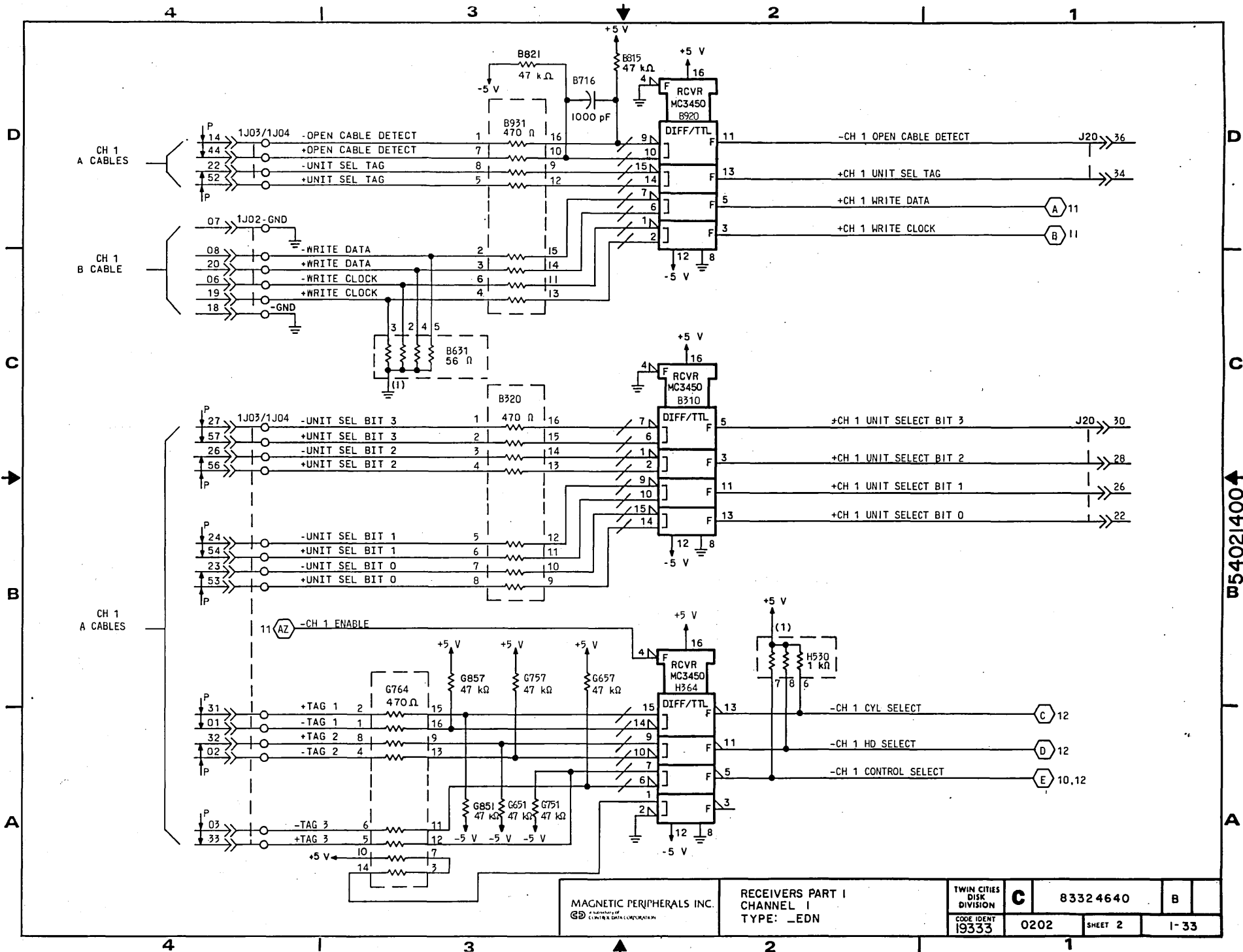
SIGNAL OUTPUTS



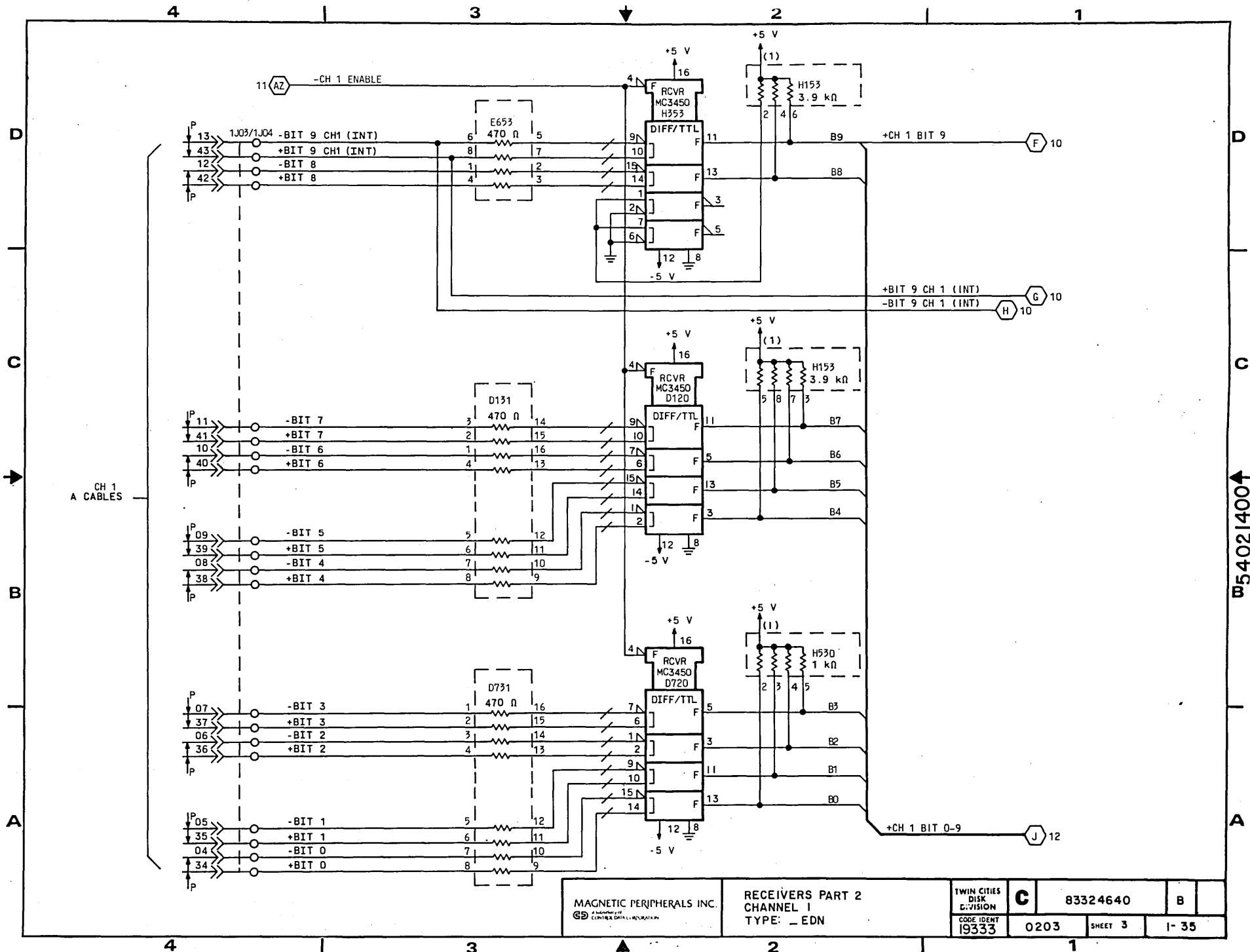
J20	>>	36	0405	J14-18
J20	>>	34	0405	J14-17
J20	>>	30	0405	J14-15
J20	>>	28	0405	J14-14
J20	>>	26	0405	J14-13
J20	>>	22	0405	J14-11

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0202	PAGE	1-32



W54021400

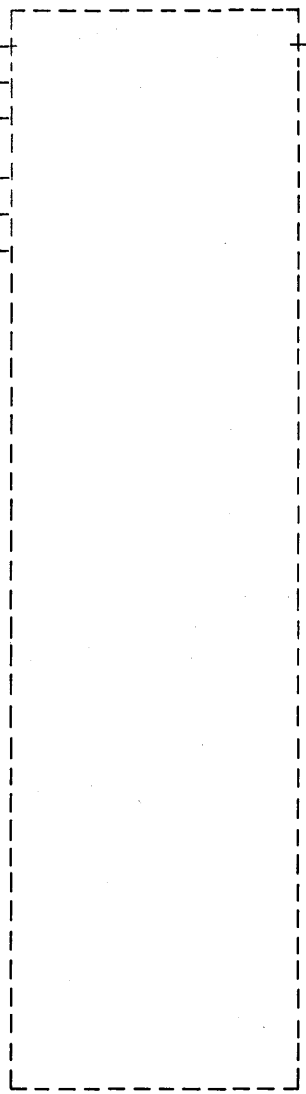


W54021400

SIGNAL INPUTS

0410	J14-20	40	>>	J20
0410	J14-35	11	>>	J20
0705*	J27-05	05	>>	P27
0758*	J27-05			
0407	J14-12	24	>>	J20
0405	J14-22	37	>>	J20
0409	J14-24	33	>>	J20

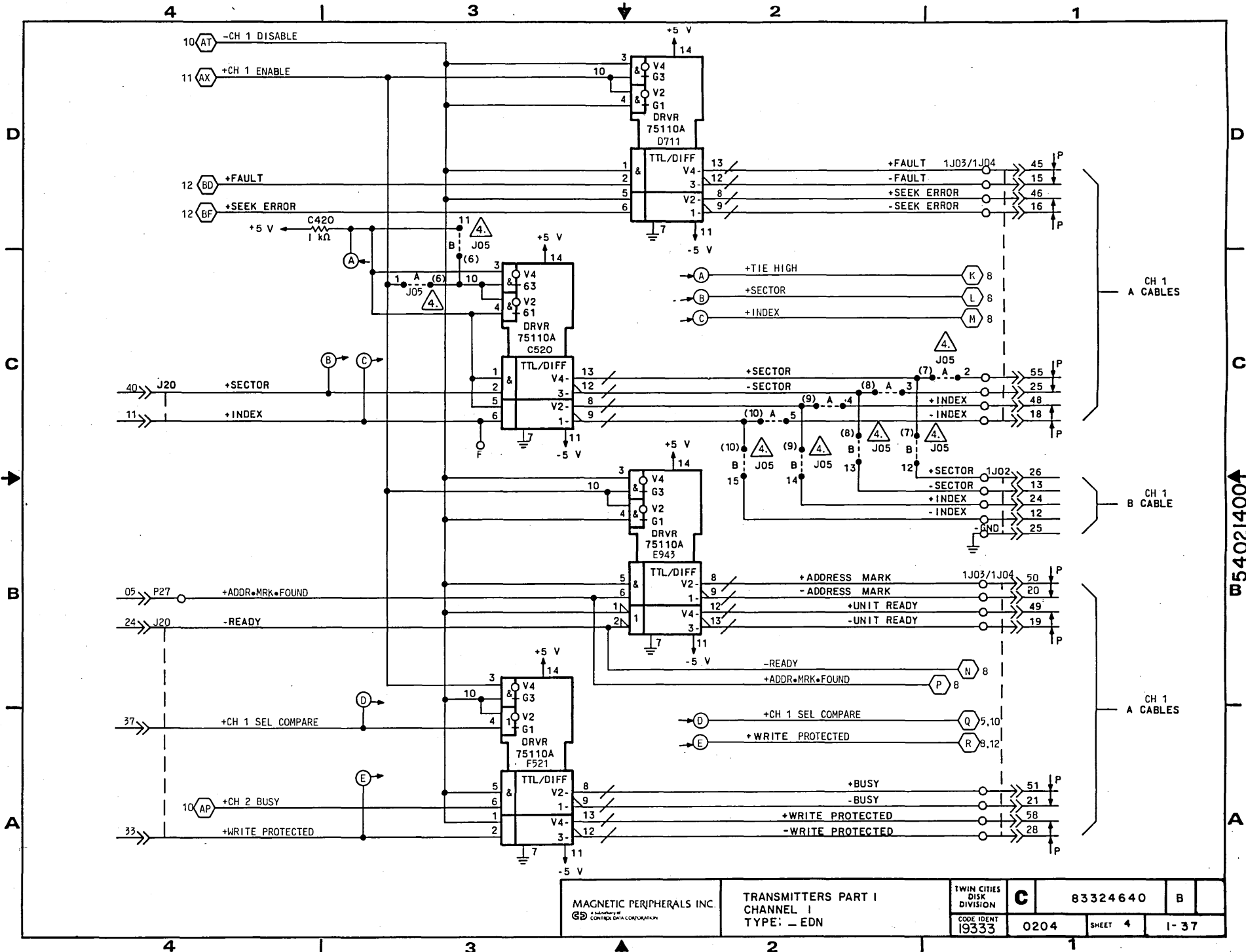
SIGNAL OUTPUTS



*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0204	PAGE	1-36



MAGNETIC PERIPHERALS INC.
a subsidiary of
 CONTROL DATA CORPORATION

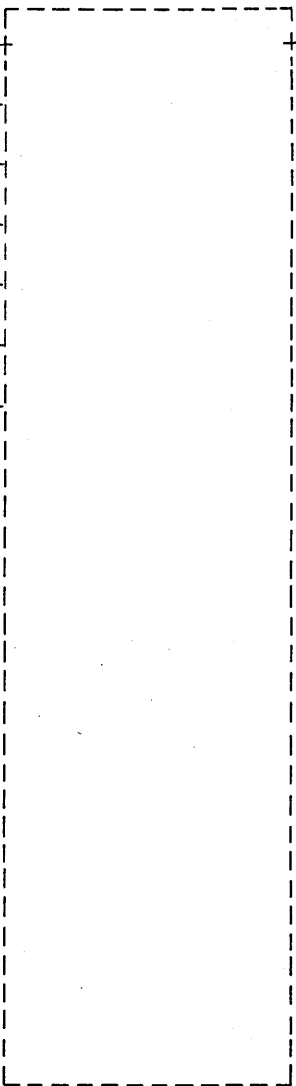
TRANSMITTERS PART I
 CHANNEL 1
 TYPE: - EDN

TWIN CITIES DISK DIVISION	C	83324640	B
CODE IDENT 19333	0204	SHEET 4	1-37

W54021400↑

SIGNAL INPUTS

0703* J27-01 01 ->> P27
 0753* J27-01
 0703* J27-02 02 ->> P27
 0753* J27-02
 0702* J27-14 14 ->> P27
 0752* J27-14
 0702* J27-13 13 ->> P27
 0752* J27-13
 0702* J27-11 11 ->> P27
 0752* J27-11
 0702* J27-10 10 ->> P27
 0752* J27-10
 0701* J27-12 12 ->> P27
 0751* J27-12



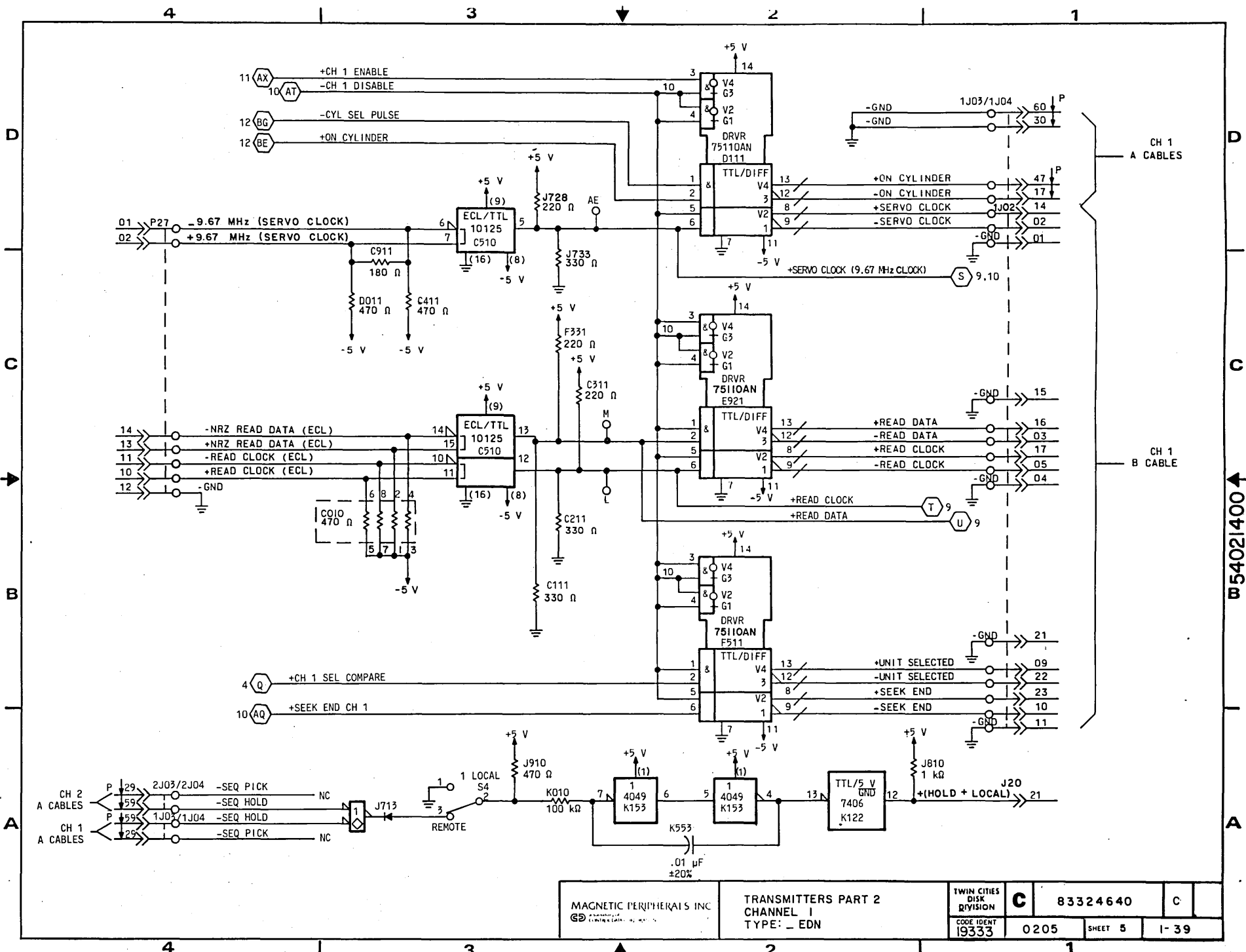
SIGNAL OUTPUTS

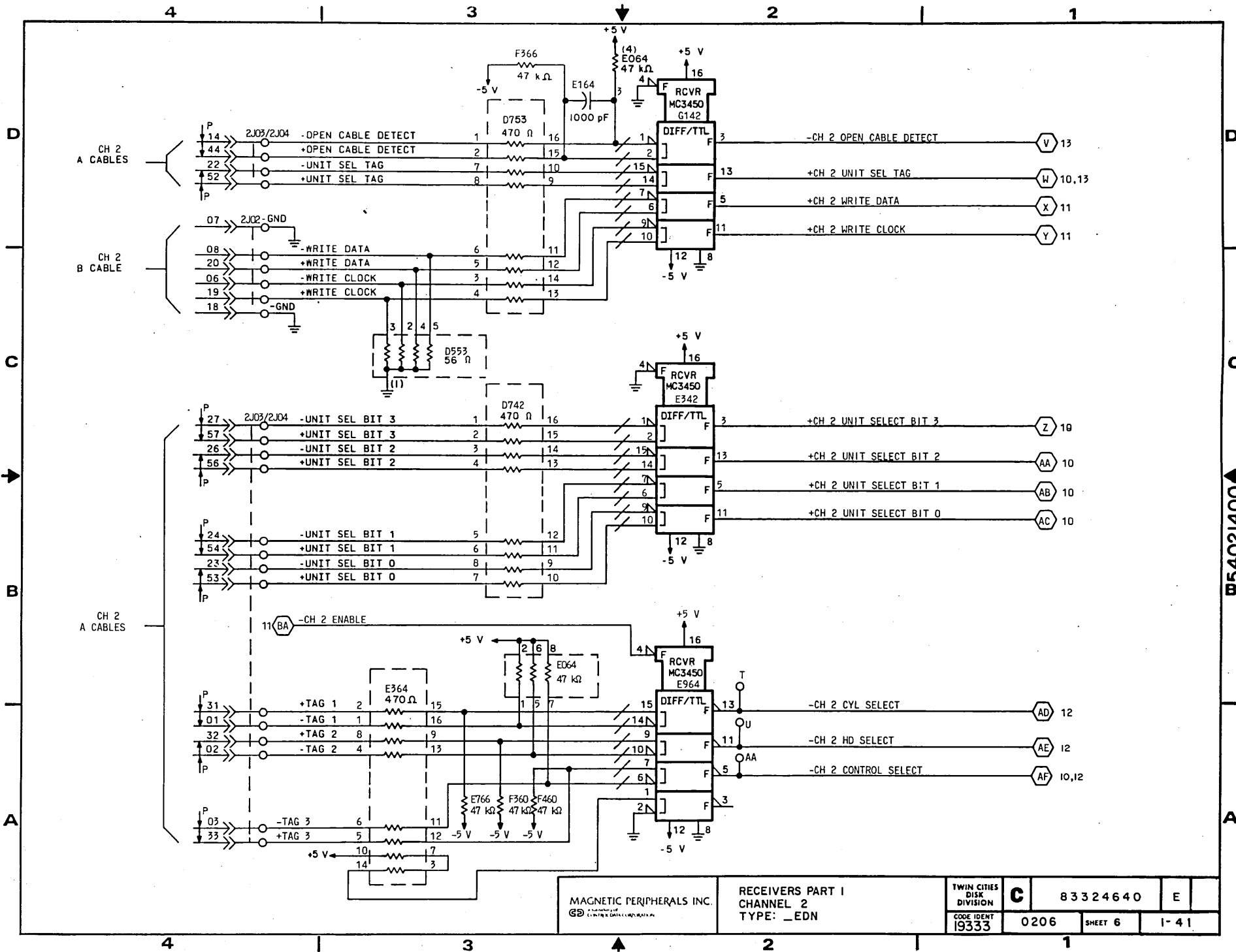
J20 ->> 21 0407 J14-30

*070X and 08XX apply to drives with 2-board
 read/write (PFX/PGX)
 075X applies to drives with 1-board read/write
 (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640	REV	H
CROSS REF NO	0205	PAGE	1-38	



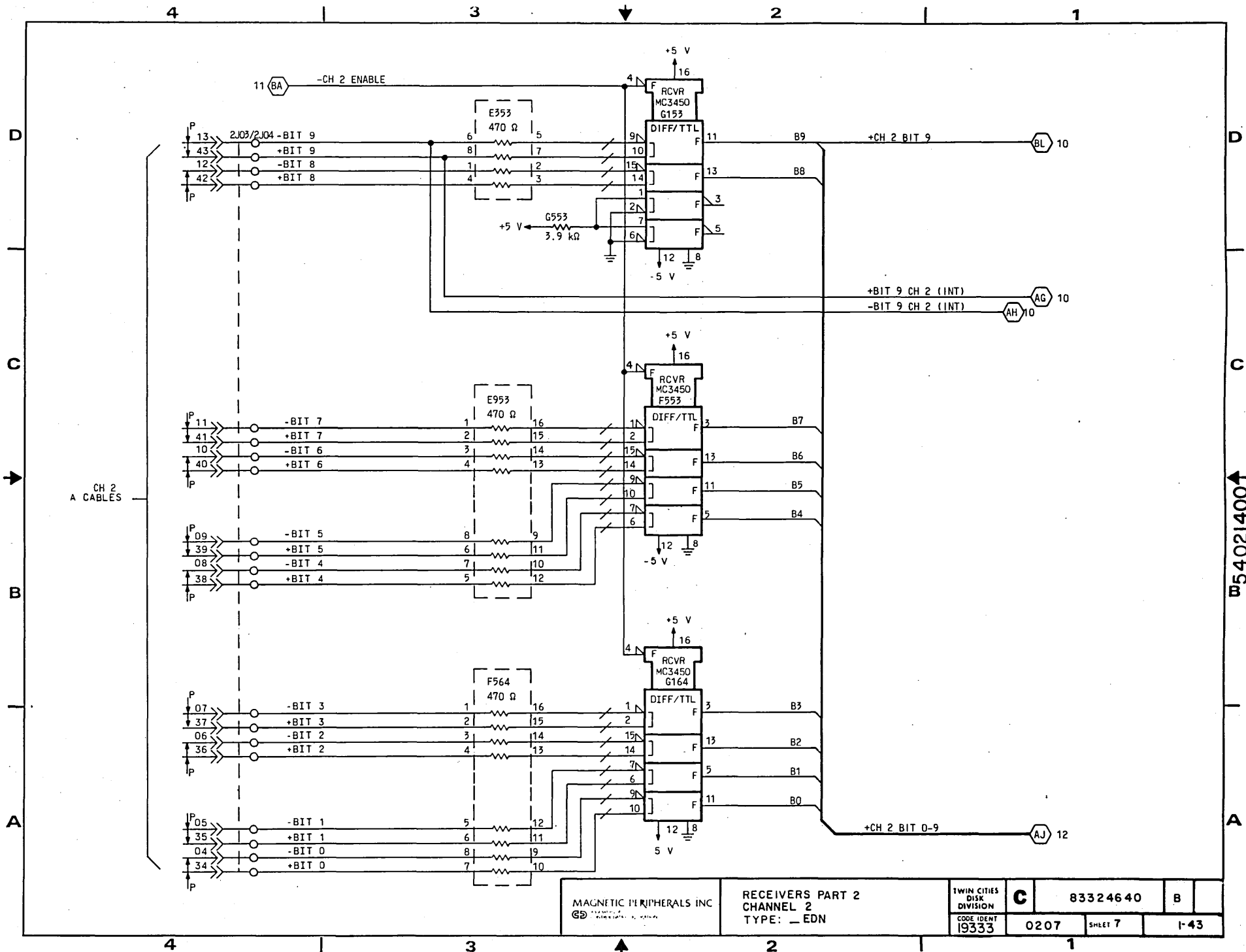


MAGNETIC PERIPHERALS INC.
 G.D. CORPORATION
 10000 WILSON AVENUE
 BETHESDA, MARYLAND 20814

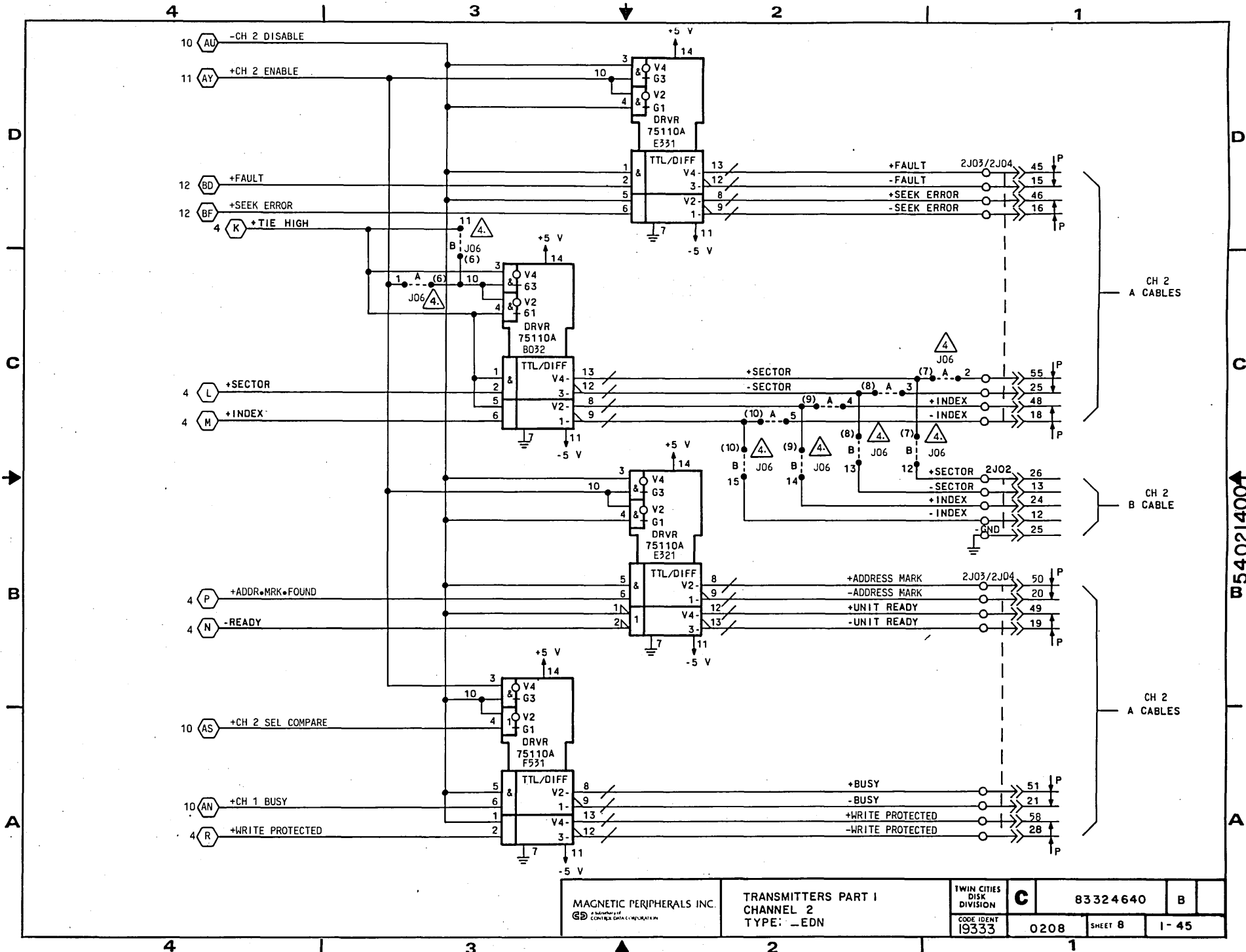
RECEIVERS PART I
 CHANNEL 2
 TYPE: _EDN

TWIN CITIES DISK DIVISION	C	83324640	E
CODE IDENT 19333	0206	SHEET 6	1-41

B54021400↑



B54021400↑

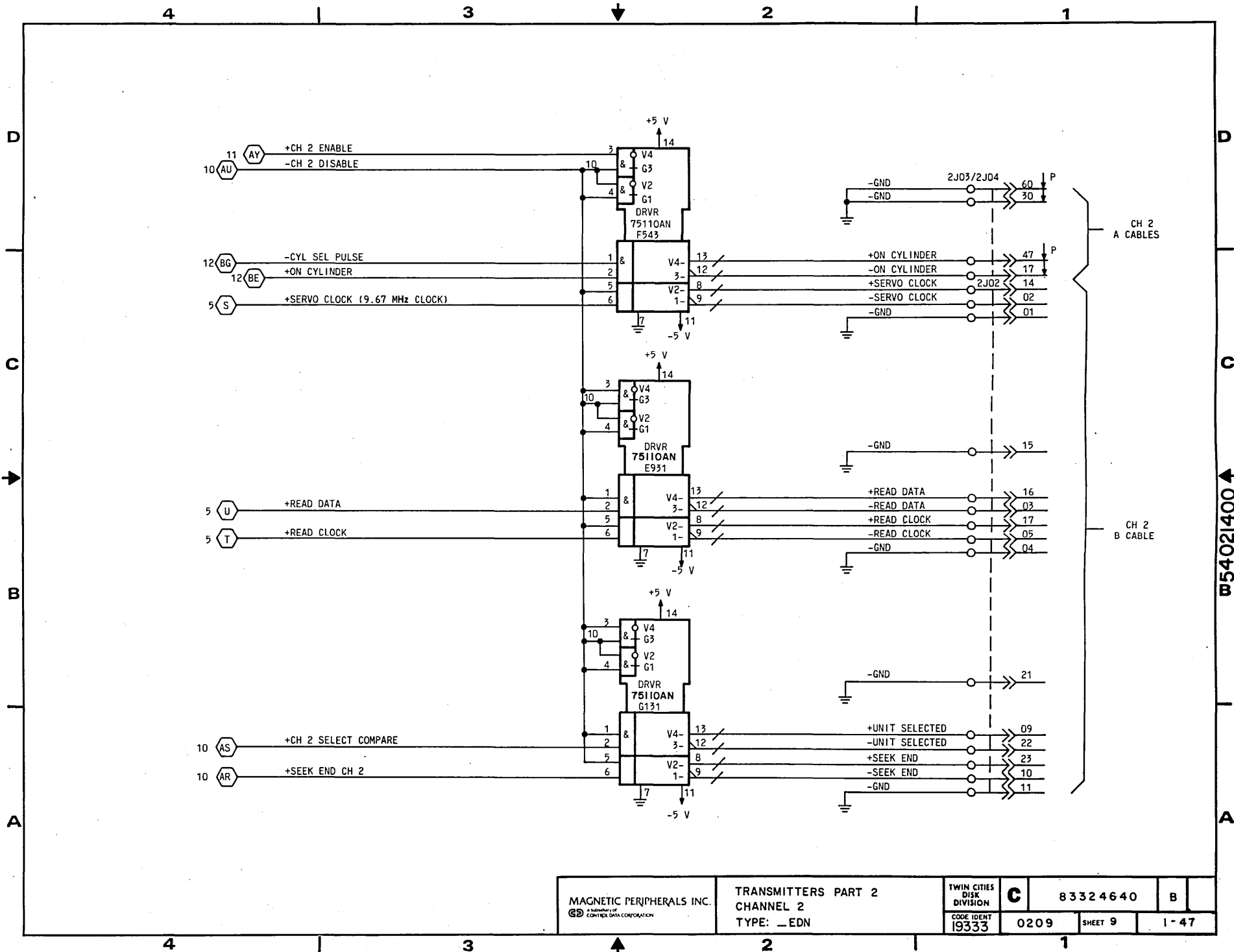


MAGNETIC PERIPHERALS INC.
SD A MEMBER OF
CONTRON DATA CORPORATION

TRANSMITTERS PART I
 CHANNEL 2
 TYPE: -EDN

TWIN CITIES DISK DIVISION	C	83324640	B
CODE IDENT 19333	0208	SHEET B	1-45

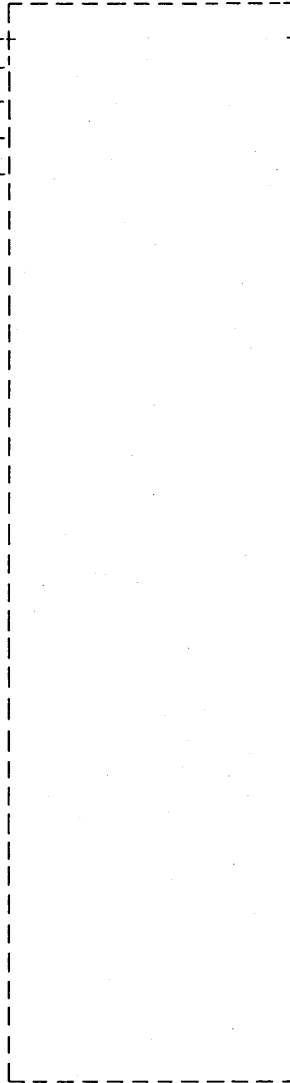
W54021400



B54021400

SIGNAL INPUTS

0404 J14-21 -39-->>J20
0405 J14-32 -17-->>J20
0405 J14-07 14 -->>J20
0405 J14-06 12 -->>J20
0410 J14-16 32 -->>J20

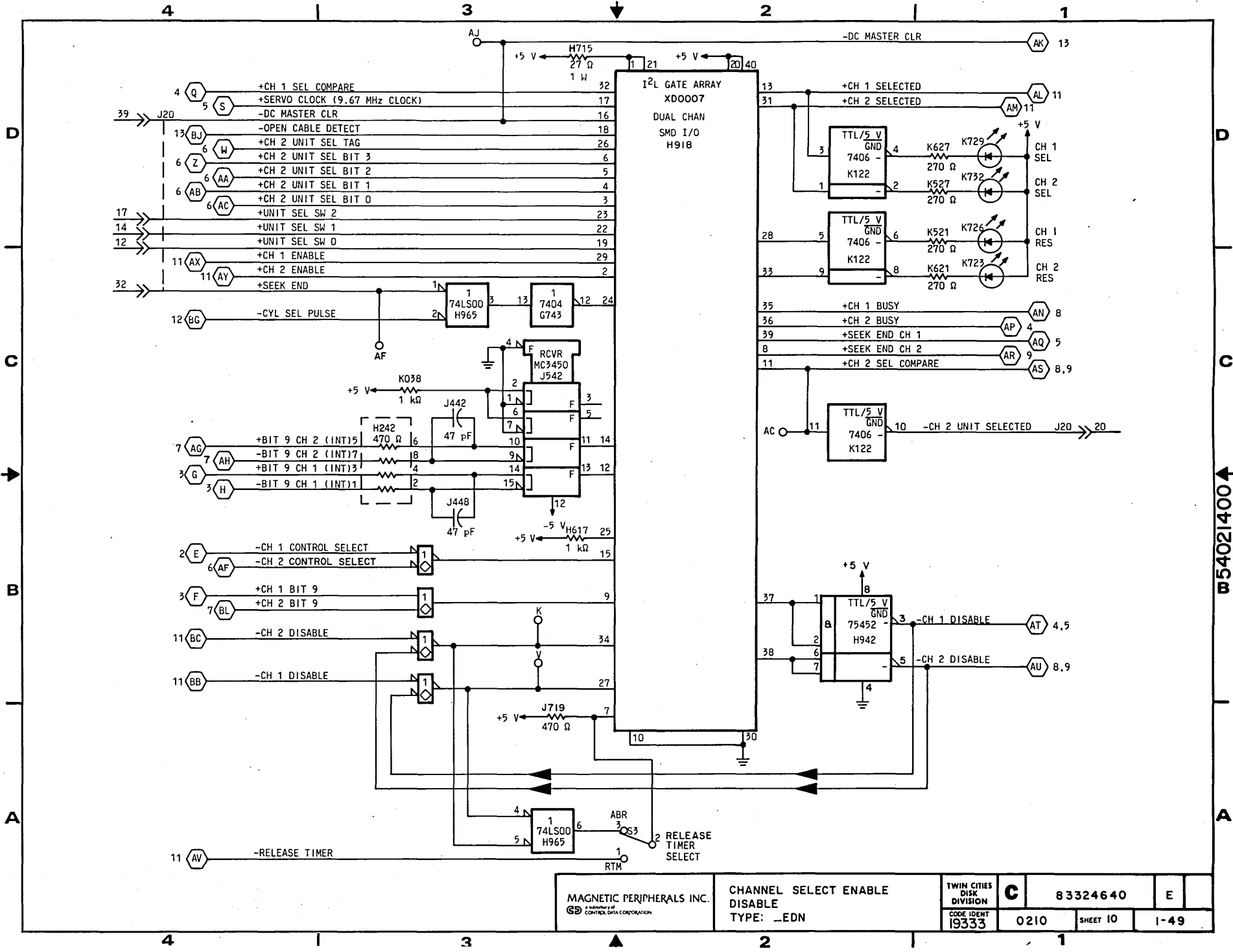


SIGNAL OUTPUTS

J20-->>-20- 0405 J14-10

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640		REV	B
CROSS REF NO	0210	PAGE	1-48		

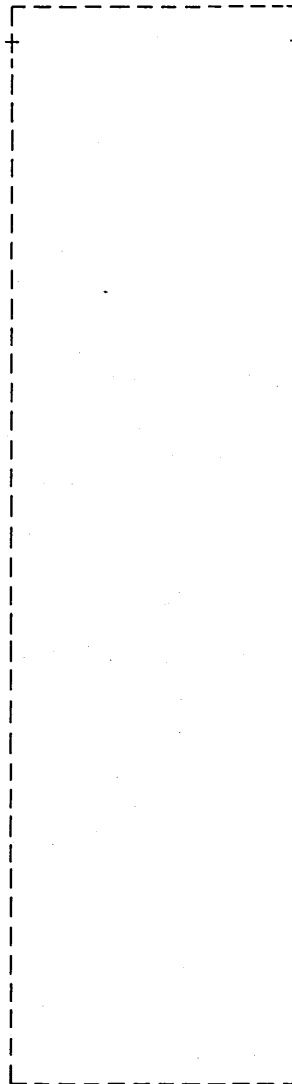


MAGNETIC PERIPHERALS INC. A Division of CONTROL DATA CORPORATION	CHANNEL SELECT ENABLE DISABLE TYPE: _EDN	TWIN CITIES DISK DIVISION	C	83324640	E
		CODE IDENT 19333	0210	SHEET 10	1-49

W54021400

SIGNAL INPUTS

SIGNAL OUTPUTS



P27 >> 18

0701* J27-18
0751* J27-18

P27 >> 20

0702* J27-20
0752* J27-20

P27 >> 19

0702* J27-19
0752* J27-19

P27 >> 17

0702* J27-17
0752* J27-17

P27 >> 16

0702* J27-16
0752* J27-16

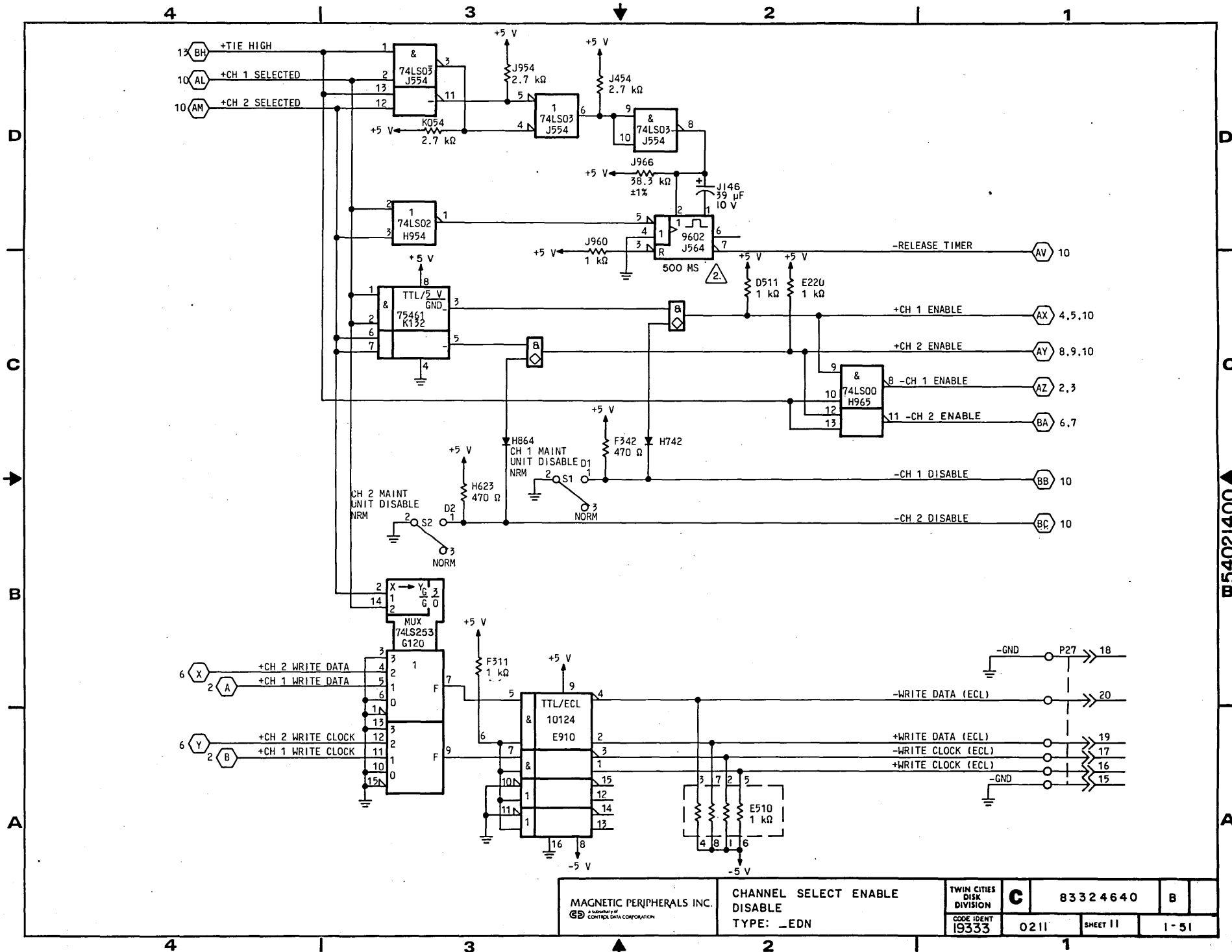
P27 >> 15

0701* J27-15
0751* J27-15

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		REV	
83324640		H	
CROSS REF NO	PAGE		
0211	1-50		

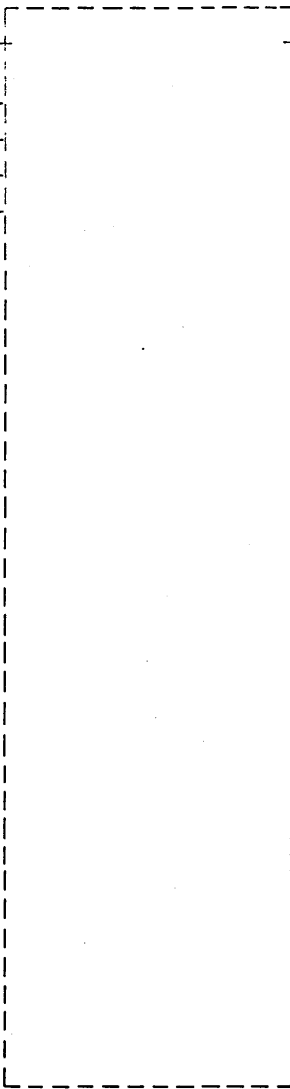


W54021400

MAGNETIC PERIPHERALS INC. A DIVISION OF CONTROL DATA CORPORATION	CHANNEL SELECT ENABLE DISABLE TYPE: _EDN	TWIN CITIES DISK DIVISION	C	83324640	B
	CODE IDENT 19333	0211	SHEET 11	1-51	

SIGNAL INPUTS

0704* J27-08 08 >> P27
 0757* J27-08
 0409 J14-31 19 >> J20
 0406 J14-08 16 >> J20
 0406 J14-09 18 >> J20
 0403 J14-29 23 >> J20



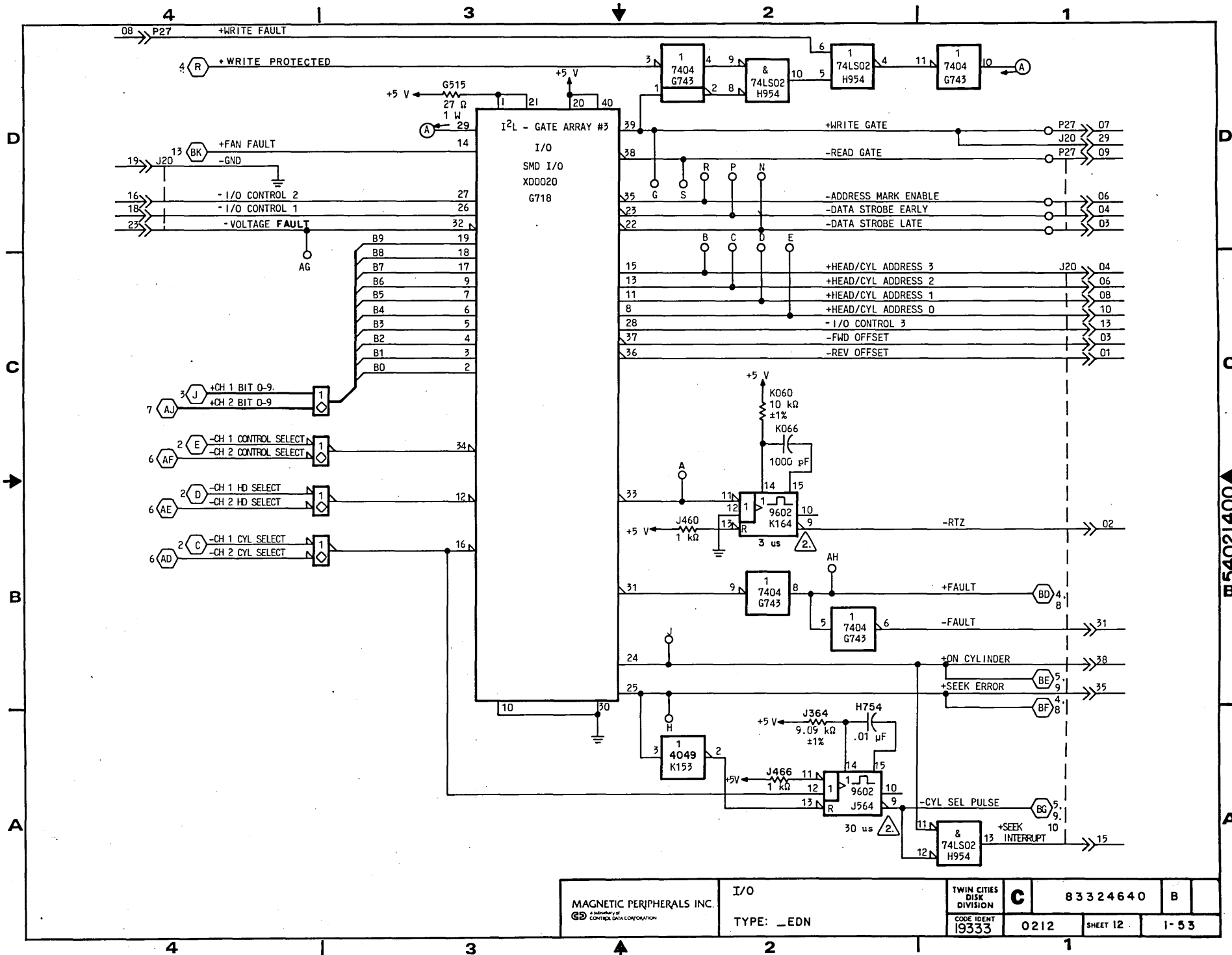
SIGNAL OUTPUTS

P27 >> 07 0702* J27-07
 0752* J27-07
 J20 >> 29 0409 J14-26
 P27 >> 09 0704* J27-09
 0757* J27-09
 P27 >> 06 0704* J27-06
 0757* J27-06
 P27 >> 04 0705* J27-04
 0758* J27-04
 P27 >> 03 0705* J27-03
 0758* J27-03
 J20 >> 04 0406 J14-02
 J20 >> 06 0406 J14-03
 J20 >> 08 0406 J14-04
 J20 >> 10 0406 J14-05
 J20 >> 13 0406 J14-34
 J20 >> 03 0418 J14-39
 J20 >> 01 0418 J14-40
 J20 >> 02 0406 J14-01
 J20 >> 31 0406 J14-25
 J20 >> 38 0410 J14-19
 J20 >> 35 0410 J14-23
 J20 >> 15 0406 J14-33

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640		REV	H
CROSS REF NO	0212	PAGE	1-52		

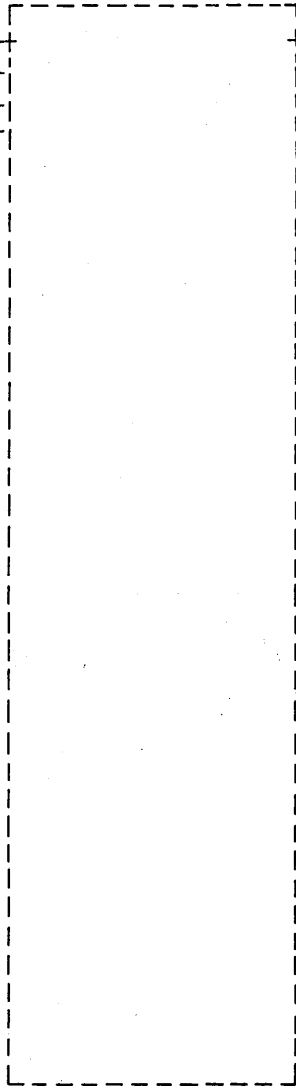


MAGNETIC PERIPHERALS INC. A subsidiary of CONTRAC DATA CORPORATION	I/O	TWIN CITIES DISK DIVISION	C	83324640	B
	TYPE: _EDN	CODE IDENT 19333	0212	SHEET 12	1-53

B 54021400A

SIGNAL INPUTS

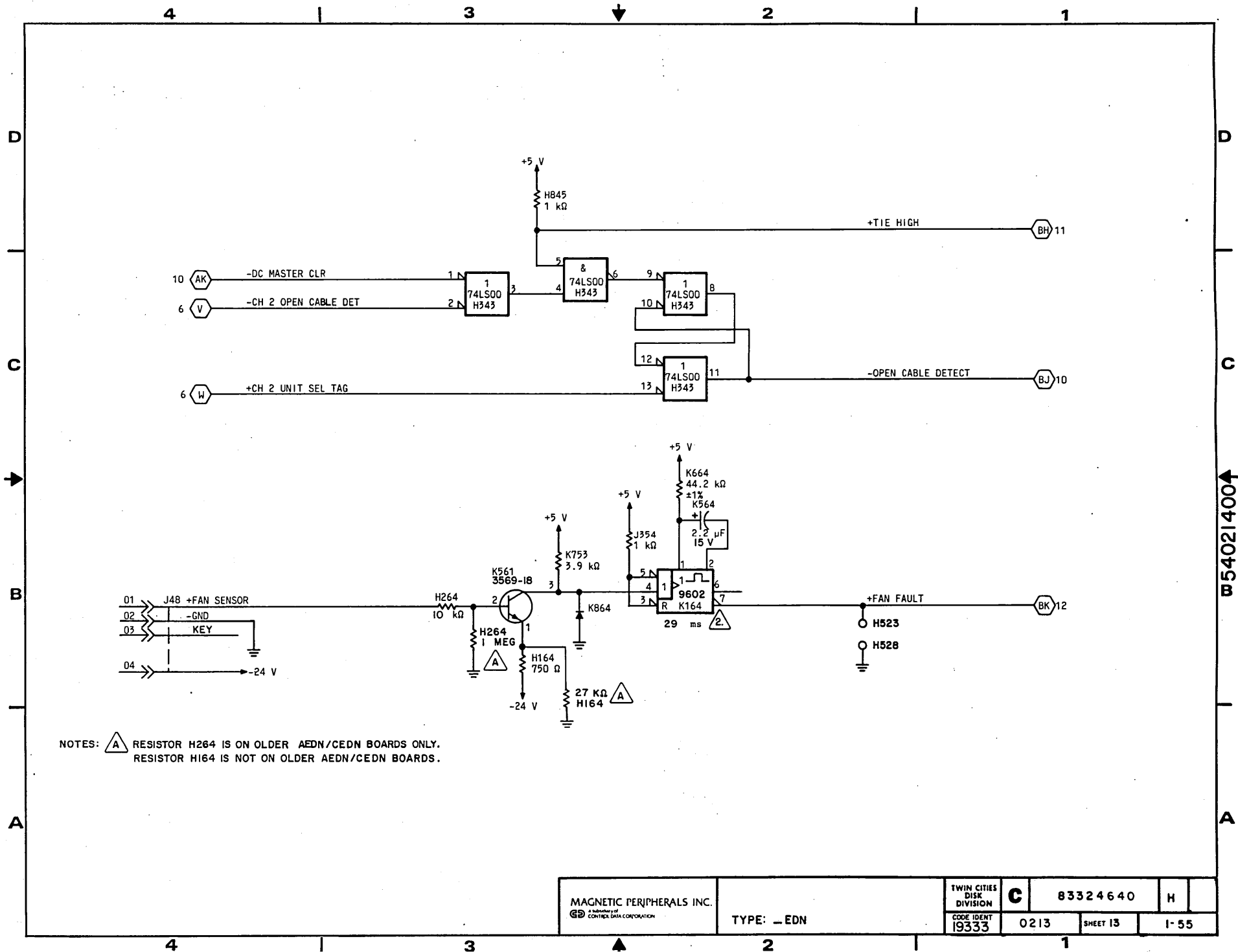
From Fan 01 -> J48
From Fan 02 -> J48
From Fan 03 -> J48
From Fan 04 -> J48



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0213	PAGE	1-54

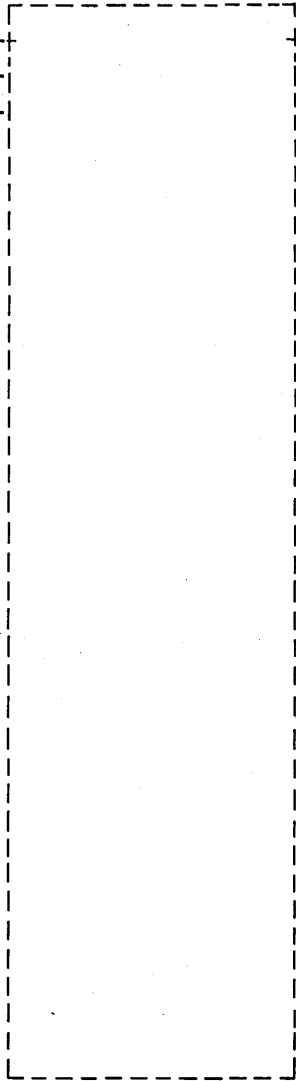


W540214004

NOTES: **A** RESISTOR H264 IS ON OLDER AEDN/CEDN BOARDS.
RESISTOR H164 IS NOT ON OLDER AEDN/CEDN BOARDS.

SIGNAL INPUTS

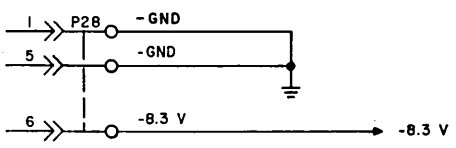
0411 J28-01 01 ->> P28
0411 J28-05 05 ->> P28
0402 J28-06 06 ->> P28



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0301	PAGE	1-56



PART NO RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
00 THRU 99	01	DJ050078	PRE-RELEASED	/	5/21/82	DLD	II
	A	1312 ADD'D TO TOL 4-27-82	RELEASED	DLM	8-20-82	DLD	II
	B	DJ05096	DELETE NOTE	DLM	8-20-82	DLD	II
	C	DJ03137	CORRECTIONS	DLM	10-15-82	DLD	III

REFERENCE DRAWING			MAGNETIC PERIPHERALS INC. a subsidiary of CONTECH DATA CORPORATION		TITLE				
COMP ASSY 54000501			FIRST USED ON		SCHEMATIC DIAGRAM				
CTR 54000701			NEXT ASSEMBLY		SERVO PREAMP (FSD)				
			PASAI-A		TYPE BUBN				
COMPONENTS, EXCEPT AS NOTED			DWN	DLM	2/26/82	SIZE			
TOLERANCE	VALUE	RATING	CHKD	DG Danot	5-12-82	SMALL DISK DIVISION	C		
RES			ENGR	RJ Nelson	5-12-82			83324640	B
CAP			MFG	K.M. Antec	7/24/82				
			QA	P. Kupinski	7/1/82				
			FSCM NO	19333	CROSS REF NO	0301	SHEET 1 OF 2		

4 | 3 | 2 | 1

D

D

C

C

B

B

A

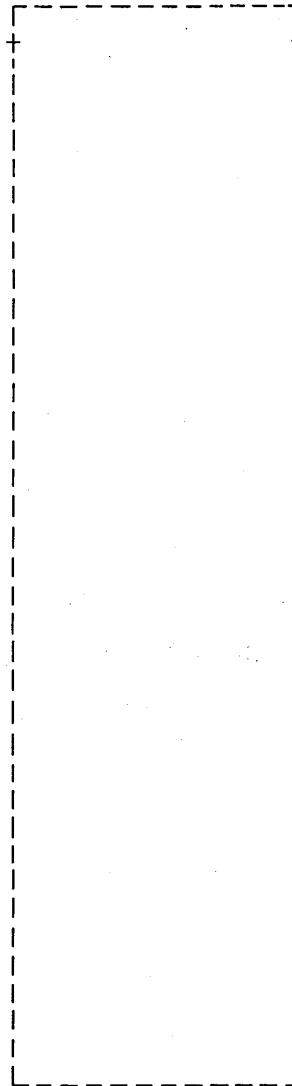
4 | 3 | 2 | 1

REF: 54000601

PRODUCT FSD

SIGNAL INPUTS

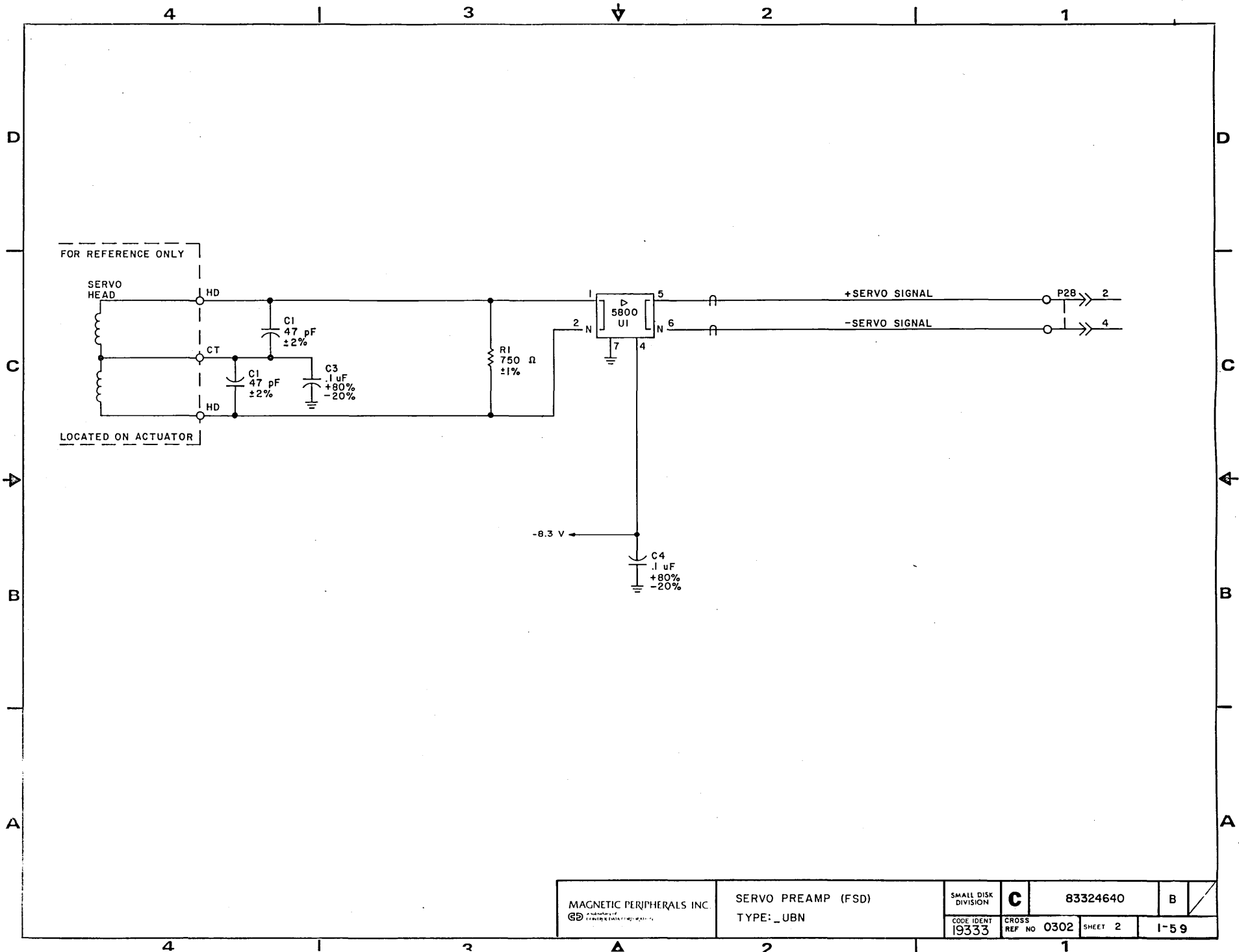
SIGNAL OUTPUTS



P28 -->> 02 0411 J28-02
P28 -->> 04 0411 J28-04

LOGIC CROSS REFERENCE INFORMATION

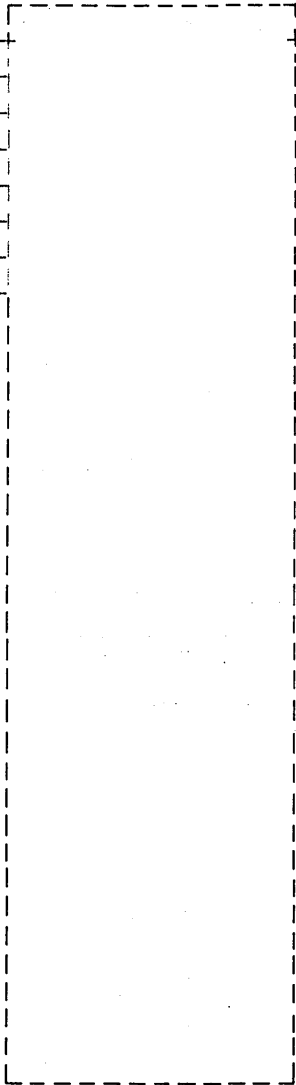
PUB	83324640	REV	B
CROSS REF NO	0302	PAGE	1-58



MAGNETIC PERIPHERALS INC. <small>GE</small>	SERVO PREAMP (FSD)	SMALL DISK DIVISION	C	83324640	B
	TYPE: _UBN	CODE IDENT 19333	CROSS REF NO 0302	SHEET 2	1-59

SIGNAL INPUTS

1002	P15-11	05	>>	J21
1002	P15-04	07	>>	J21
1002	P15-01	08	>>	J21
1002	P15-02	03	>>	J21
1002	P15-05	04	>>	J21
1002	P15-03	01	>>	J21
1002	P15-06	02	>>	J21
1002	P15-15	06	>>	J21



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0401	PAGE 1-60	

UNUSED LOGIC ELEMENTS		
ELEMENT	LOCATION	OUTPUT PINS
*10102	P127	14
*10102	N337	2, 14
74LS04	K314	2, 6, 12
74LS86	E235	3, 8, 11
LM339	F124	9, 10
74LS20	E851	8
74LS00	J750	6
LM339	E662	1, 2
5012	E672	6, 11
LM393	M782	7

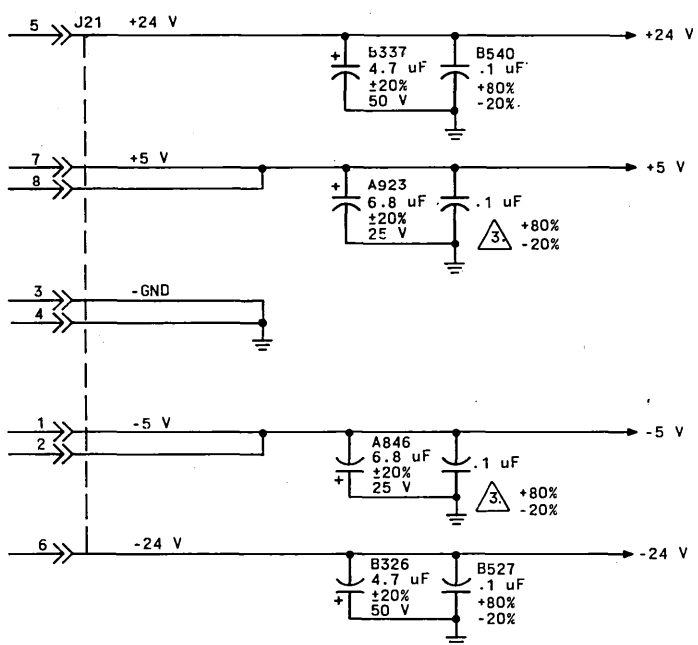
UNUSED RESISTOR PACKS	
LOCATION	PIN(S)
N505	2
H813	2, 3
K213	2, 8

PART NO. RANGE
00 THRU 99

REVISION RECORD						
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
01	DJ05012C	PRE RELEASED		6-11-82		III
02	DJ05062	CHG VALUES	DLH	7-30-82	DGD	II
A	DJ13000 DJ05012F	RELEASED		9-14-82		III
B	DJ05098	ADD CARD TYPE CPXX	HDK	11-17-82		
C	DJ03132	CORRECTIONS	HDK	11-17-82		
D	DJ05154	CPXX TO DPXX	MJ	3-3-83		
E	DJ05203	CORRECTION	MJ	3-3-83		
F	DJ03330	REPLACE DIODE	MJ	9-12-83		
G	DJ05529	CHANGE COMPONENT VALUES	MJ	9-12-83		
H	DJ05644	CORRECTIONS	JG	6-25-84		
J	DJ05833	CHG RESISTOR VALUE	JG	6-25-84		
K	DJ03676	CHG DIODE & TRANSISTOR	JG	11-27-84		
L	DJ03714	COMPONENT CHANGE	JG	11-27-84		
M	DJ05950	CHG RESISTORS	JG	11-27-84		
N	DJ28061	RESISTOR CHANGE	CB	5-2-86		

UNUSED TRANSISTOR PACKS		
ELEMENT	LOCATION	PINS
MPQ2369	D515	1, 2, 3
MPQ2907	N356	5, 6, 7

FILTER CAPS			
.1 uF			
+5 V	-5 V	+15 V	-15 V
B316	F115	B650	L556
E116	N008	E581	K664
E615	P402	F681	P075
E625	N018	H281	M868
E734	P520	J281	J762
E743	M527	K681	G174
E752	N027	M681	D962
G438	N827	N781	D837
G618	P527	M468	C355
K229	N737	P568	D674
H515		C381	C962
J262		D225	
L050		B350	
L737			
K252			
L828			
M320			
K715			
J812			
P008			
M408			
L814			
J640			
D162			

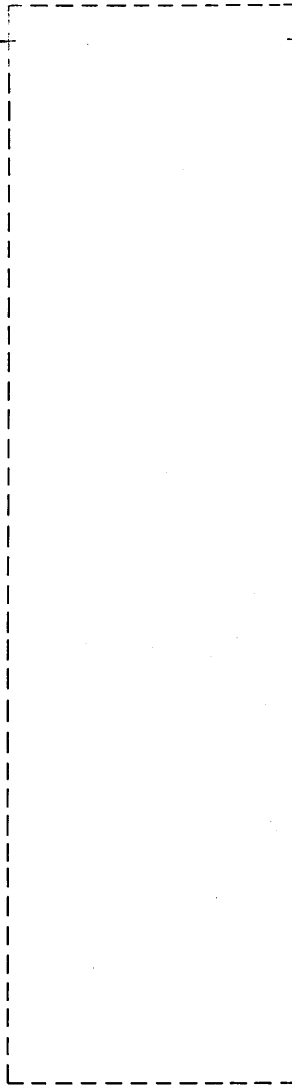


- NOTES:
- UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GROUND, AND PIN 14 CONNECTED TO +5 V.
ALL 16 PIN IC'S HAVE PIN 8 CONNECTED TO GROUND, AND PIN 16 CONNECTED TO +5 V.
 - UNUSED TTL LOGIC ELEMENTS GROUNDED EXCEPT FOR *.
 - SEE TABLE FOR .1 uF FILTER CAP LOCATIONS.
 - FOR EASE OF LOCATING WHICH PAGE A CONNECTOR PIN IS ON, SEE PIN/SHEET CROSS REFERENCE DIAGRAMS ON SHEET 2.
 - DIODE, SILICON, 1N4001, 95637301.
 - DIODE, SCHOTTKY, 5024140.
 - DIODE, SILICON, 50240107.
 - DIODE, SILICON 50240113.
 - TRANSISTOR, SNPN, 50222500.
 - TRANSISTOR, SPNP, 50222402.
 - TRANSISTOR ARRAY, QUAD PNP, 50212700.
 - TRANSISTOR ARRAY, QUAD NPN, 50212700.
 - TRANSISTOR ARRAY, MPQ, 15165609.
 - TEST SELECT RESISTORS TO BE SELECTED FROM DRAWING 94357500 AND INSERTED DURING CARD TEST PER CARD TEST REQUIREMENTS.
 - DELAY TIME FOR REFERENCE ONLY.

REFERENCE DRAWING		MAGNETIC PERIPHERALS INC.		TITLE	
COMP ASSY 54338901		a subsidiary of CONTRONICS DATA CORPORATION		SCHEMATIC DIAGRAM	
CTR 54339101		FIRST USED ON	NEXT ASSEMBLY	TYPES CPXX/DPXX	
		PA5A1-A		EPXX (REV AL & BLW)	
COMPONENTS, EXCEPT AS NOTED					
TOLERANCE	VALUE	RATING	DWN	F.A.	7-14-82
RES	±5%	OHMS	CHKD	<i>D. J. Donat</i>	9-23-82
CAP	±10%		ENGR	<i>R. J. Velter</i>	9-23-82
			MFG	<i>K. M. Bostk</i>	9-27-82
			QA	<i>M. Saida</i>	9-29-82
SMALL DISK DIVISION		FSCM NO. 19333		CROSS REF NO. 0401	
83324640		SHEET 1 OF 23		PAGE 1-61	

SIGNAL INPUTS

0102 P26-11 11 -> J26



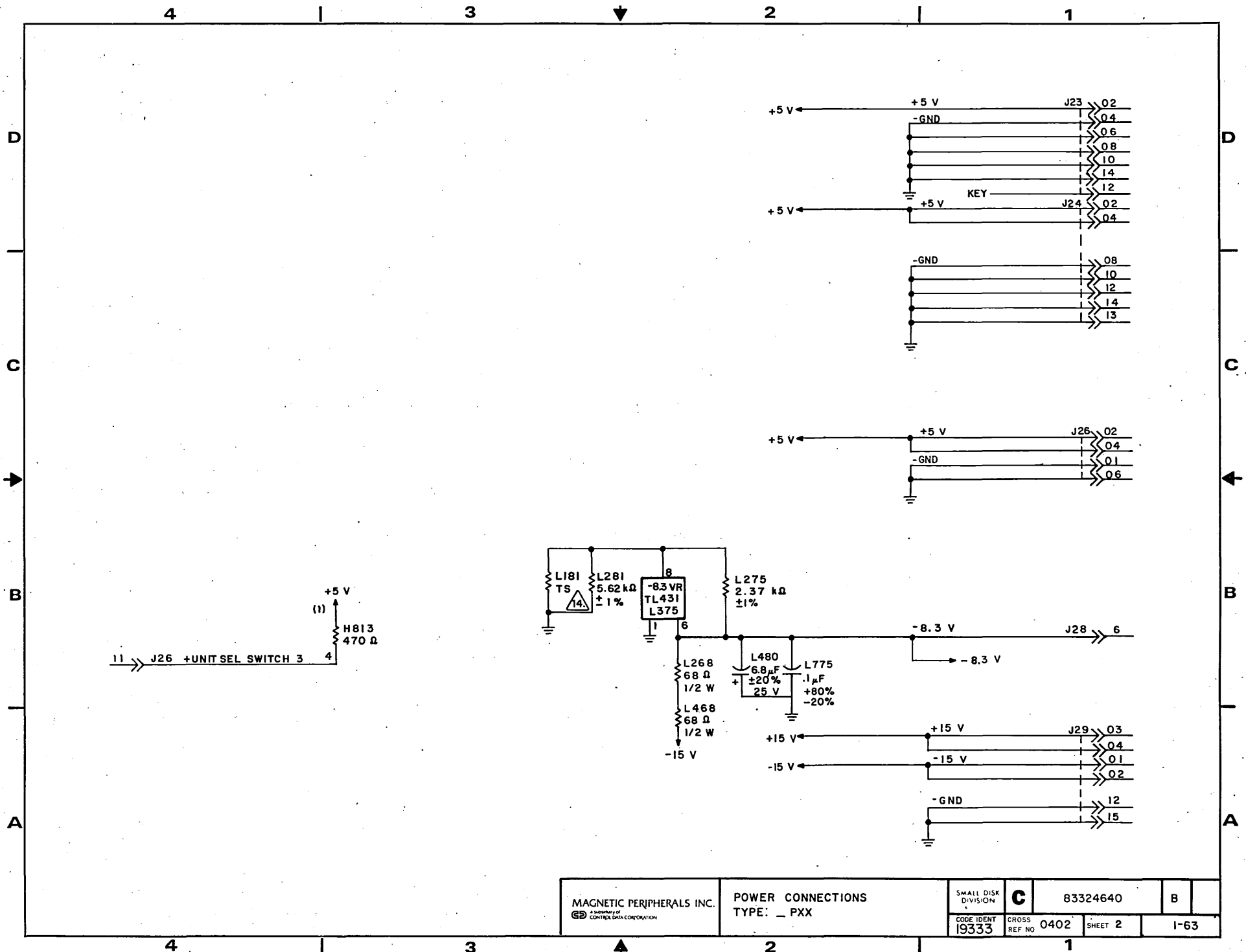
SIGNAL OUTPUTS

-----	J23 -> 02	0501	P23-02
-----	J23 -> 04	0502	P23-04
-----	J23 -> 06	0502	P23-06
-----	J23 -> 08	0502	P23-08
-----	J23 -> 10	0502	P23-10
-----	J23 -> 14	0502	P23-14
-----	J23 -> 12	NC	-
-----	J24 -> 02	0601	P24-02
-----	J24 -> 04	0601	P24-04
-----	J24 -> 08	0601	P24-08
-----	J24 -> 10	0601	P24-10
-----	J24 -> 12	0601	P24-12
-----	J24 -> 14	0601	P24-14
-----	J24 -> 13	0603	P24-13
-----	J26 -> 02	0101	P26-02
-----	J26 -> 04	0101	P26-04
-----	J26 -> 01	0101	P26-01
-----	J26 -> 06	0101	P26-06
-----	J28 -> 06	0301	P28-06
-----	J29 -> 03	0801*	J30-24
		0701*	J31-24
		0751*	J30-24
-----	J29 -> 04	0801*	J30-23
		0701*	J31-23
		0751*	J30-23
-----	J29 -> 01	0801*	J30-26
		0701*	J31-26
		0751*	J30-26
-----	J29 -> 02	0801*	J30-25
		0701*	J31-25
		0751*	J30-25
-----	J29 -> 12	0801*	J30-15
		0701*	J31-15
		0751*	J30-15
-----	J29 -> 15	0801*	J30-12
		0701*	J31-12
		0751*	J30-12

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

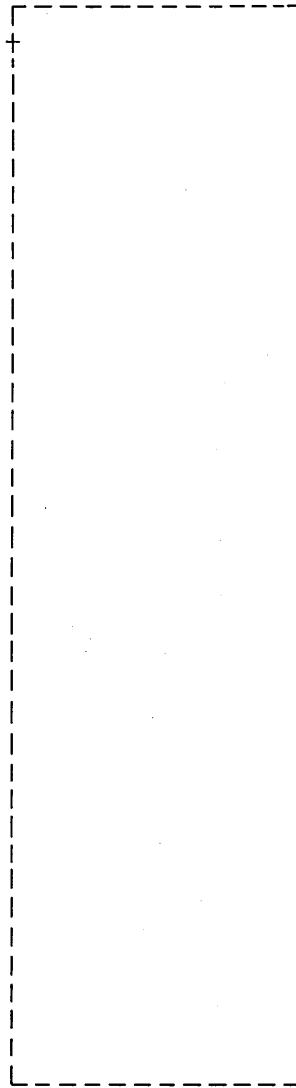
PUB 83324640		REV H
CROSS REF NO 0402	PAGE 1-62	



MAGNETIC PERIPHERALS INC. <small>A subsidiary of CONTROL DATA CORPORATION</small>	POWER CONNECTIONS TYPE: _ PXX		SMALL DISK DIVISION C	83324640	B
	CODE IDENT 19333	CROSS REF NO 0402	SHEET 2	I-63	

SIGNAL INPUTS

SIGNAL OUTPUTS

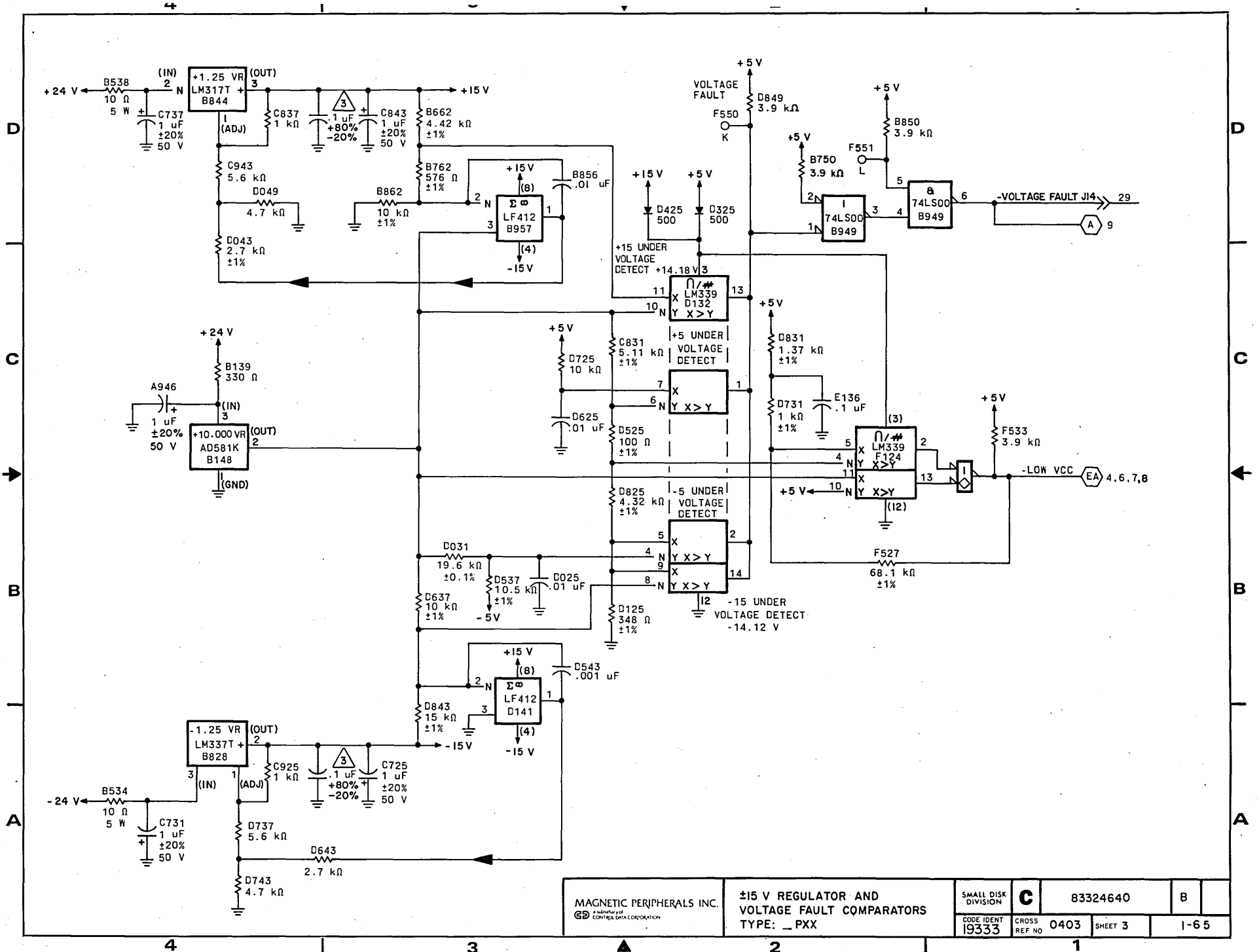


J14 >> 29

<u>SINGLE</u>	<u>DUAL</u>
<u>CHANNEL UNITS</u>	<u>CHANNEL UNITS</u>
0206 J20-18	0212 J20-23

LOGIC CROSS REFERENCE INFORMATION

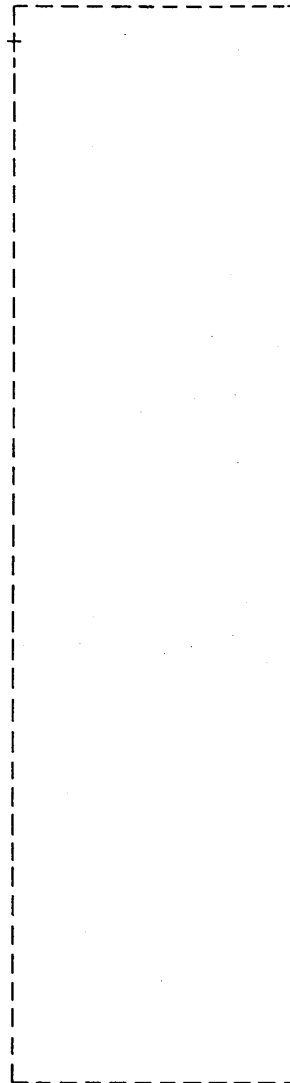
PUB	83324640	REV	B
CROSS REF NO	0403	PAGE	1-64



MAGNETIC PERIPHERALS INC. A subsidiary of GD GENERAL DYNAMICS CORPORATION	±15 V REGULATOR AND VOLTAGE FAULT COMPARATORS TYPE: _ PXX	SMALL DISK DIVISION	C	83324640	B
		CODE IDENT 19333			

SIGNAL INPUTS

SIGNAL OUTPUTS

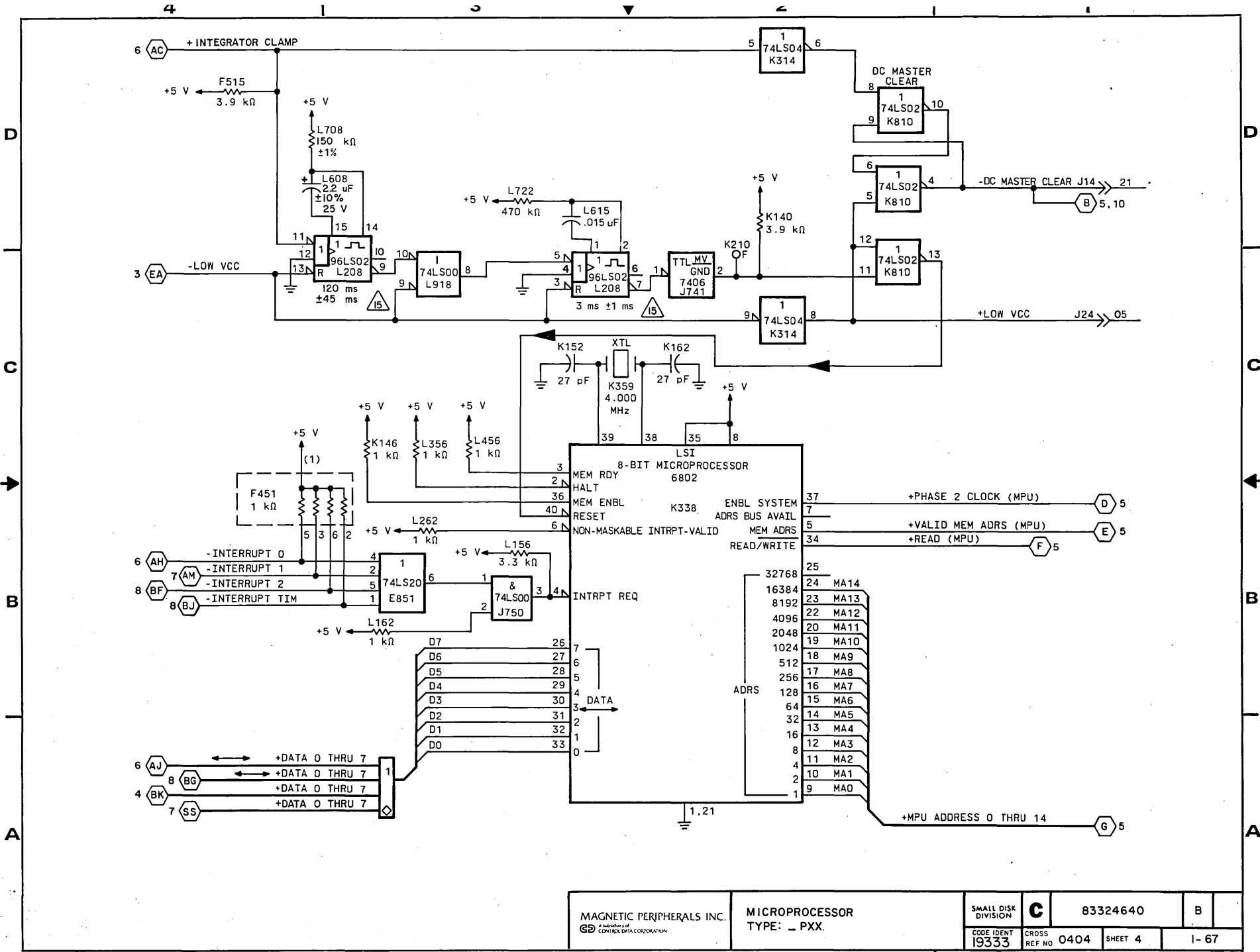


J14 >> 21
J24 >> 05

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
0206	J20-02	0210	J20-39
0602	P24-05	0602	P24-05

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	C
CROSS REF NO	0404	PAGE	1-66

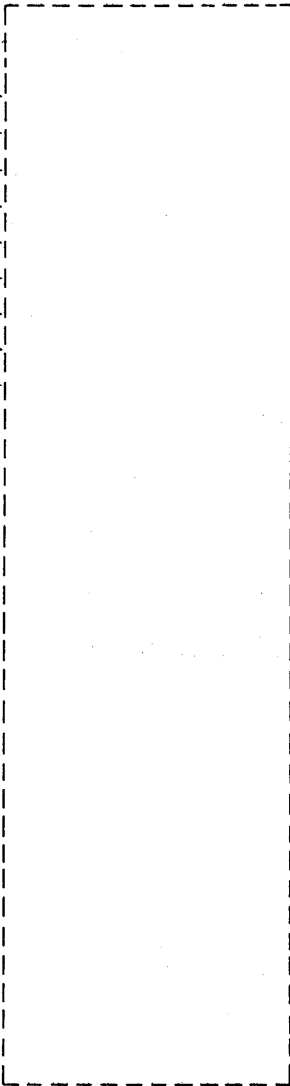


MAGNETIC PERIPHERALS INC. A DIVISION OF GD CONTROL DATA CORPORATION	MICROPROCESSOR TYPE: _ PXX.	SMALL DISK DIVISION	C	83324640	B
		CODE IDENT 19333	CROSS REF NO	0404	SHEET 4

SIGNAL INPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
-----------------------------	--	---------------------------	--

0202	J20-05	0202	J20-36	18	-->> J14
0202	J20-07	0202	J20-34	17	-->> J14
0202	J20-11	0202	J20-30	15	-->> J14
0202	J20-13	0202	J20-28	14	-->> J14
0202	J20-15	0202	J20-26	13	-->> J14
0202	J20-19	0202	J20-22	11	-->> J14
0102	P26-05	0102	P26-05	05	-->> J26
0102	P26-03	0102	P26-03	03	-->> J26
0102	P26-09	0102	P26-09	09	-->> J26



SIGNAL OUTPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
-----------------------------	--	---------------------------	--

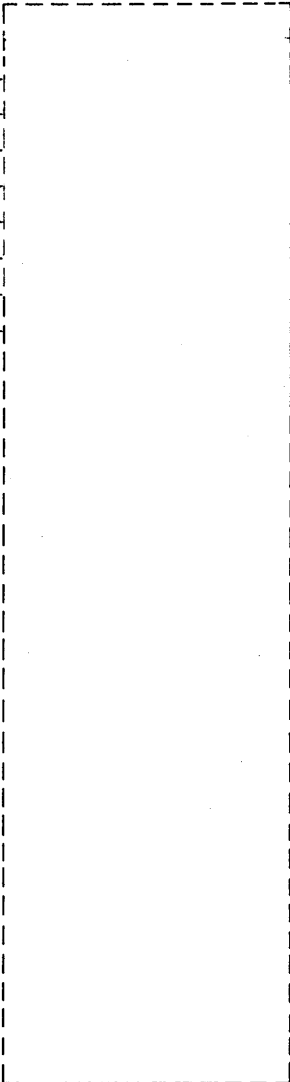
J26	-->> 07	0102	P26-07	0102	P26-07
J14	-->> 10	0202	J20-21	0210	J20-20
J14	-->> 22	NC	J20-04	0204	J20-37
J14	-->> 32	NC	J20-24	0210	J20-17
J14	-->> 07	NC	J20-27	0210	J20-14
J14	-->> 06	NC	J20-29	0210	J20-12

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV B
CROSS REF NO 0405	PAGE 1-68	

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0206	J20-26	0212	J20-15	33	>> J14
0206	J20-39	0212	J20-02	01	>> J14
0206	J20-28	0212	J20-13	34	>> J14
0206	J20-10	0212	J20-31	25	>> J14
0206	J20-37	0212	J20-04	02	>> J14
0206	J20-35	0212	J20-06	03	>> J14
0206	J20-33	0212	J20-08	04	>> J14
0206	J20-31	0212	J20-10	05	>> J14



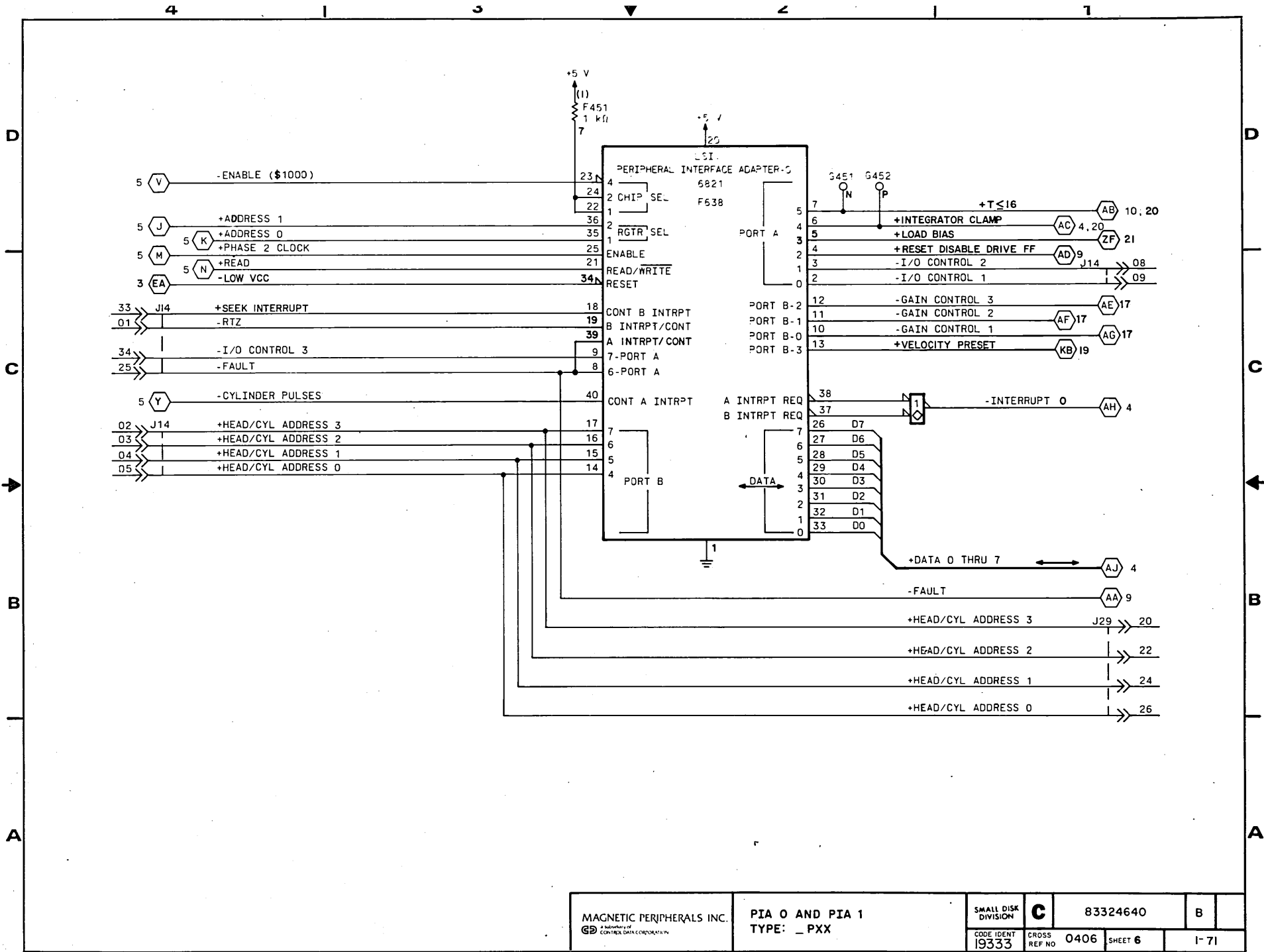
SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0206	J20-25	0212	J20-16	J14	>> 08
0206	J20-23	0212	J20-18	J14	>> 09
0701*	J31-07	0701*	J31-07	J29	>> 20
0805*	J30-07	0805*	J30-07		
0756*	J30-07	0756*	J30-07		
0701*	J31-05	0701*	J31-05	J29	>> 22
0805*	J30-05	0805*	J30-05		
0756*	J30-05	0756*	J30-05		
0701*	J31-03	0701*	J31-03	J29	>> 24
0805*	J30-03	0805*	J30-03		
0756*	J30-03	0756*	J30-03		
0701*	J31-01	0701*	J31-01	J29	>> 26
0805*	J30-01	0805*	J30-01		
0756*	J30-01	0756*	J30-01		

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

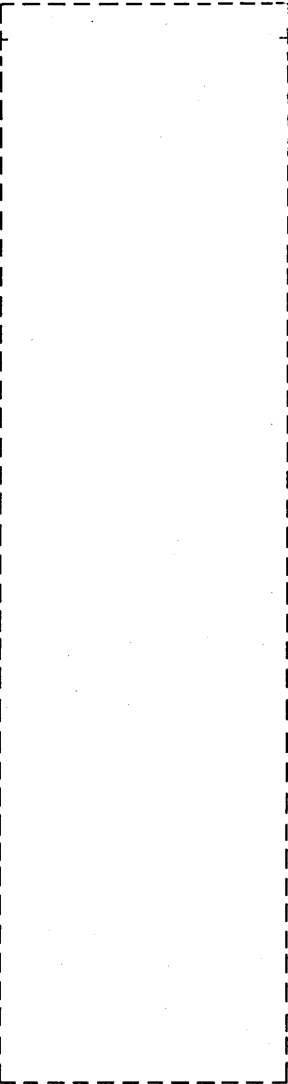
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0406	PAGE	1-70



SIGNAL INPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>			
0602	P24-09	0602	P24-09	09	>> J24
0102	P26-08	0102	P26-08	08	>> J26
0205	J20-20	0205	J20-21	30	>> J14
NC	J20-16	NC	J20-25	28	>> J14



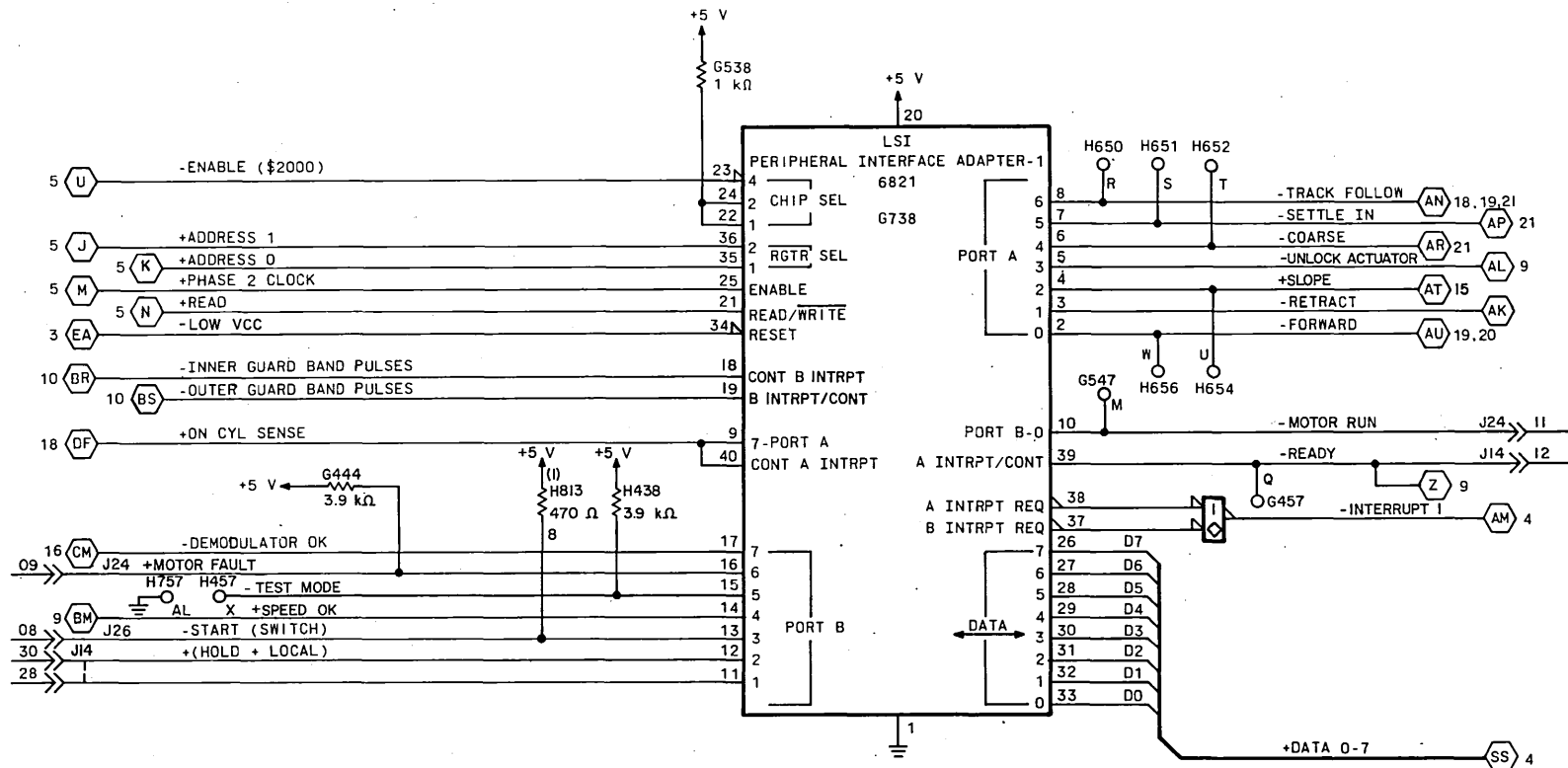
SIGNAL OUTPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>			
0602	P24-11	0602	P24-11	J24	>> 11
0207*	J20-17	0204	J20-24	J14	>> 12

*0204 on B/C/E/FEBN board.

LOGIC CROSS REFERENCE INFORMATION

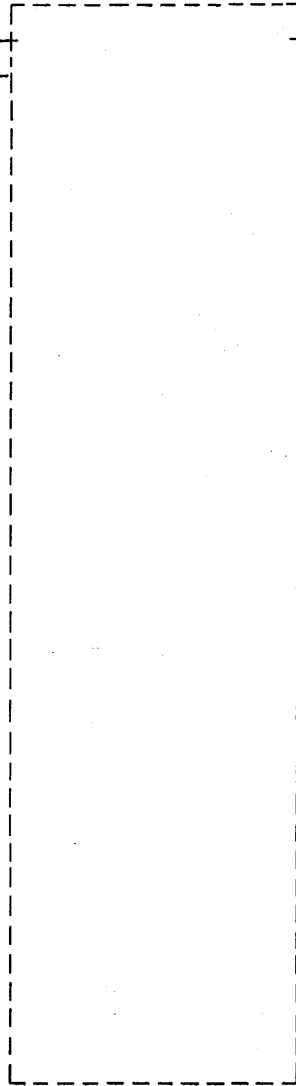
PUB 83324640		REV H
CROSS REF NO 0407	PAGE 1-72	



MAGNETIC PERIPHERALS INC. SD	PIA 0 AND PIA 1 TYPE: _PXX	SMALL DISK DIVISION	C	83324640	B
		CODE IDENT 19333	CROSS REF NO 0407	SHEET 7	1-73

SIGNAL INPUTS

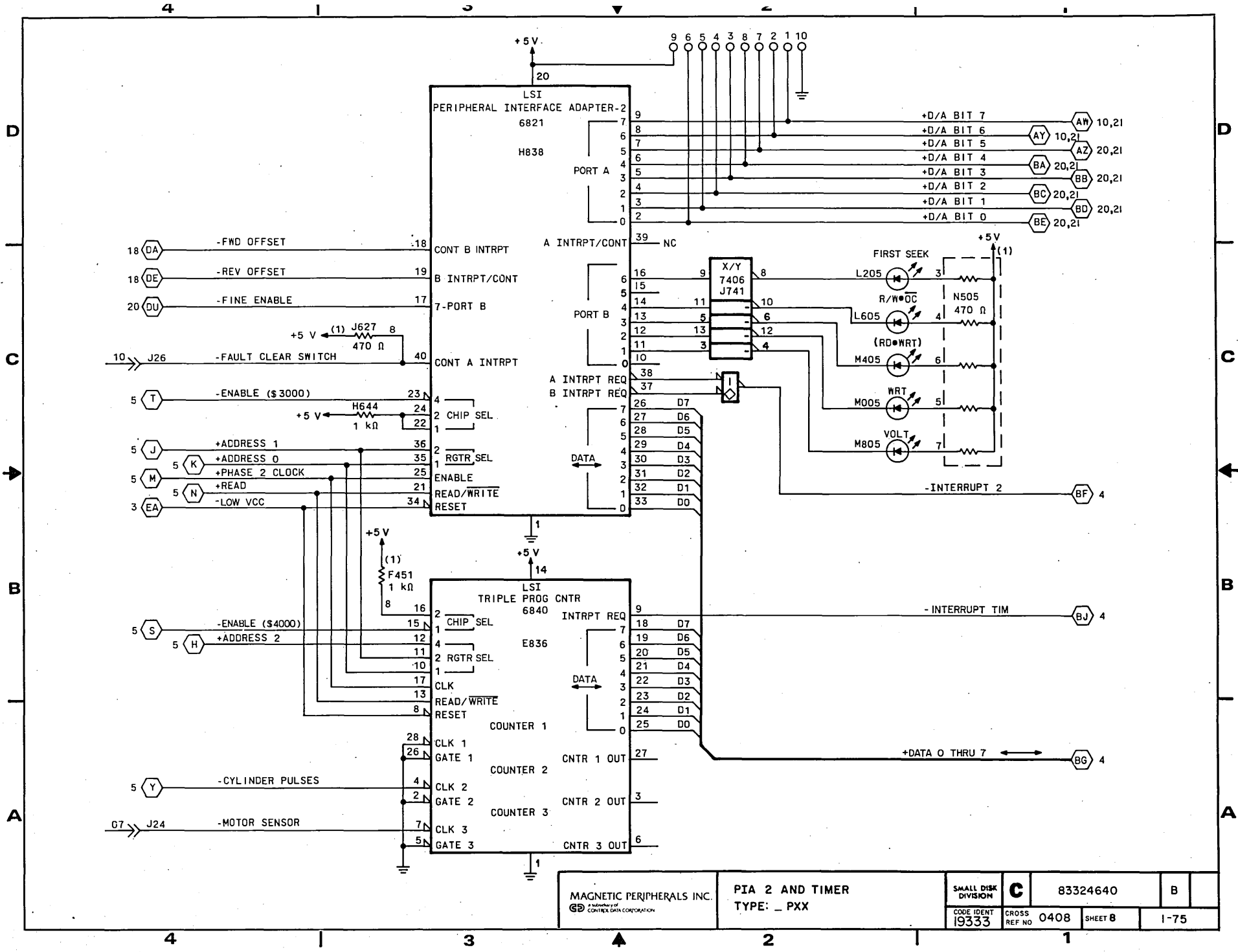
0102 P26-10 10 >> J26
0602 P24-07 07 >> J24



SIGNAL OUTPUTS

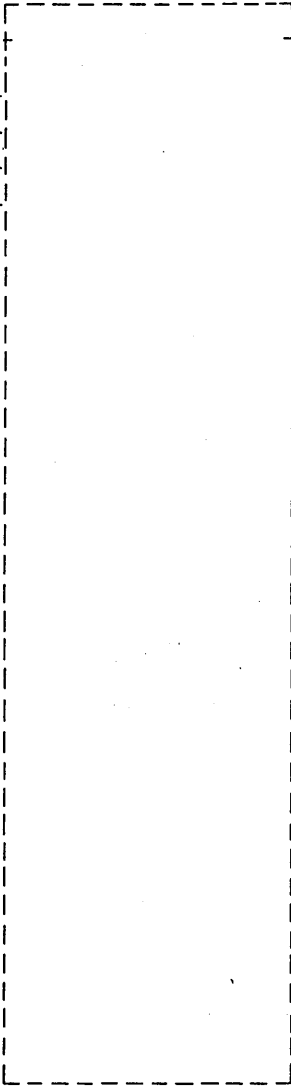
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0408	PAGE	1-74



SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0603	P24-03	0603	P24-03	03	J24
0602	P24-01	0602	P24-01	01	J24
0206	J20-12	0212	J20-29	26	J14
0102	P26-14	0102	P26-14	14	J26



SIGNAL OUTPUTS

		SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS	
J26	>>	13	0102	P26-13	0102 P26-13
J25	>>	03	1042	P25-03	1042 P25-03
J25	>>	01	NC	-	NC -
J25	>>	04	NC	-	NC -
J25	>>	02	1042	P25-02	1042 P25-02
J24	>>	06	0602	P24-06	0602 P24-06
J14	>>	31	0206	J20-22	0212 J20-19
J29	>>	09	0802*	J30-18	0802* J30-18
			0754*	J30-18	0754* J30-18
J14	>>	24	0207+	J20-08	0204 J20-33
J26	>>	12	0102	P26-12	0102 P26-12

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)
 +0204 on B/C/E/FEBN boards.

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0409	PAGE	1-76

SIGNAL INPUTS

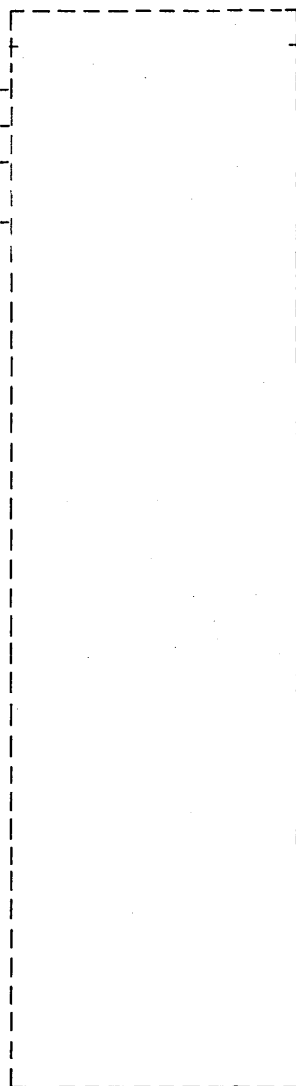
<u>SINGLE</u>		<u>DUAL</u>			
<u>CHANNEL</u>	<u>UNITS</u>	<u>CHANNEL</u>	<u>UNITS</u>		

0206	J20-03	0212	J20-38	19	>> J14
0206	J20-06	0212	J20-35	23	>> J14
0703*	J31-13	0703*	J31-13	14	>> J29
0753*	J30-13	0753*	J30-13		
0703*	J31-14	0703*	J31-14	13	>> J29
0753*	J30-14	0753*	J30-14		

SIGNAL OUTPUTS

<u>SINGLE</u>		<u>DUAL</u>	
<u>CHANNEL</u>	<u>UNITS</u>	<u>CHANNEL</u>	<u>UNITS</u>

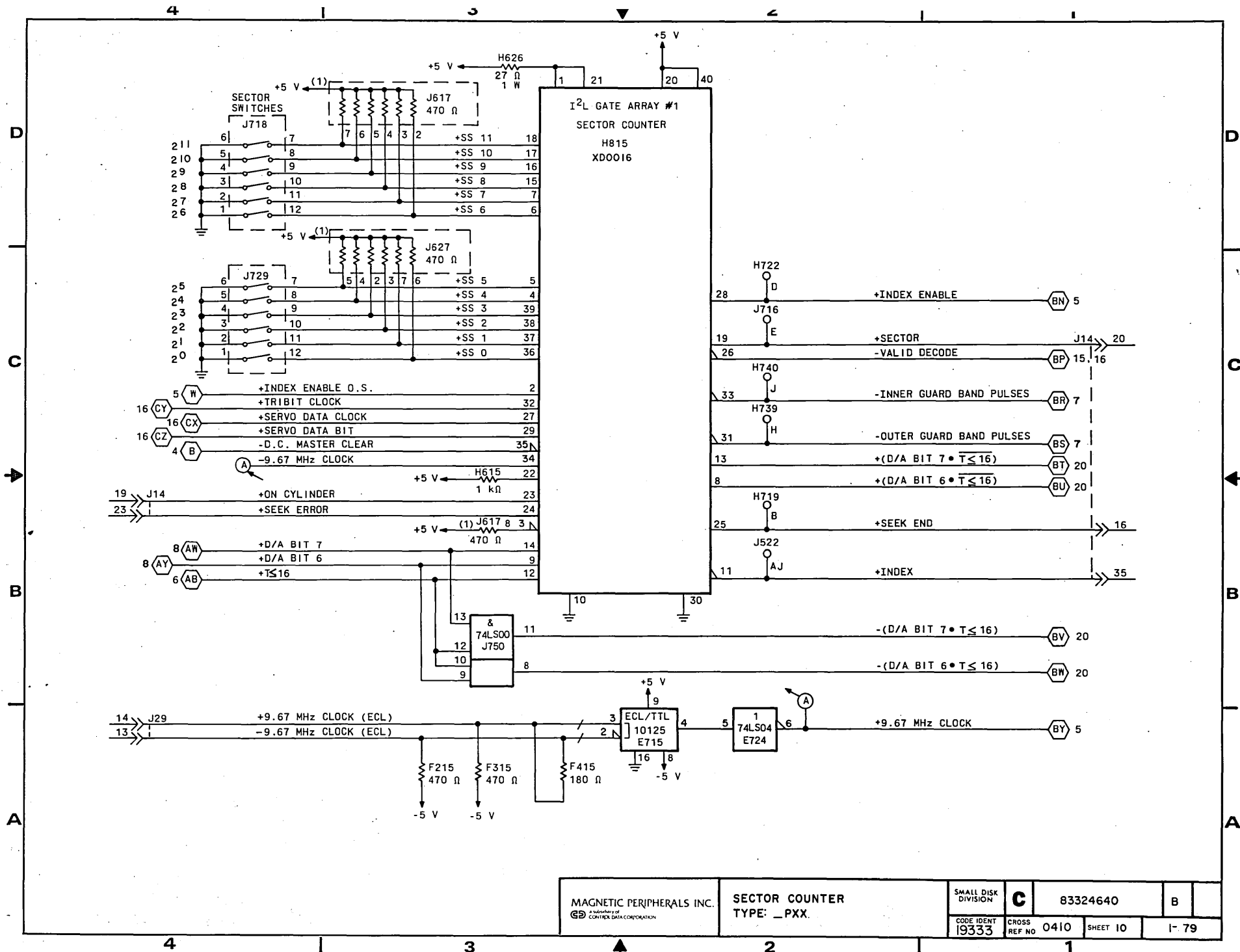
J14	>>	20	0204	J20-01	0204	J20-40
J14	>>	16	0205	J20-09	0210	J20-32
J14	>>	35	0204	J20-30	0204	J20-11



*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

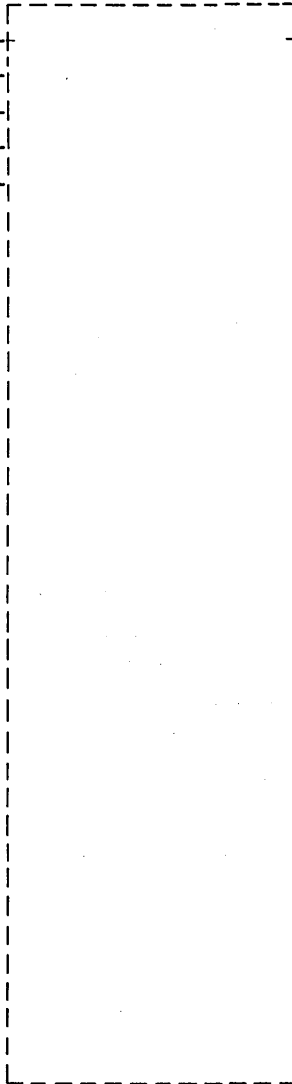
PUB		REV	
83324640		H	
CROSS REF NO	PAGE		
0410	1-78		



MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> GD CONTROL DATA CORPORATION	SECTOR COUNTER TYPE: _PXX.		SMALL DISK DIVISION	C	83324640	B
	CODE IDENT 19333	CROSS REF NO	0410	SHEET 10	1-79	

SIGNAL INPUTS

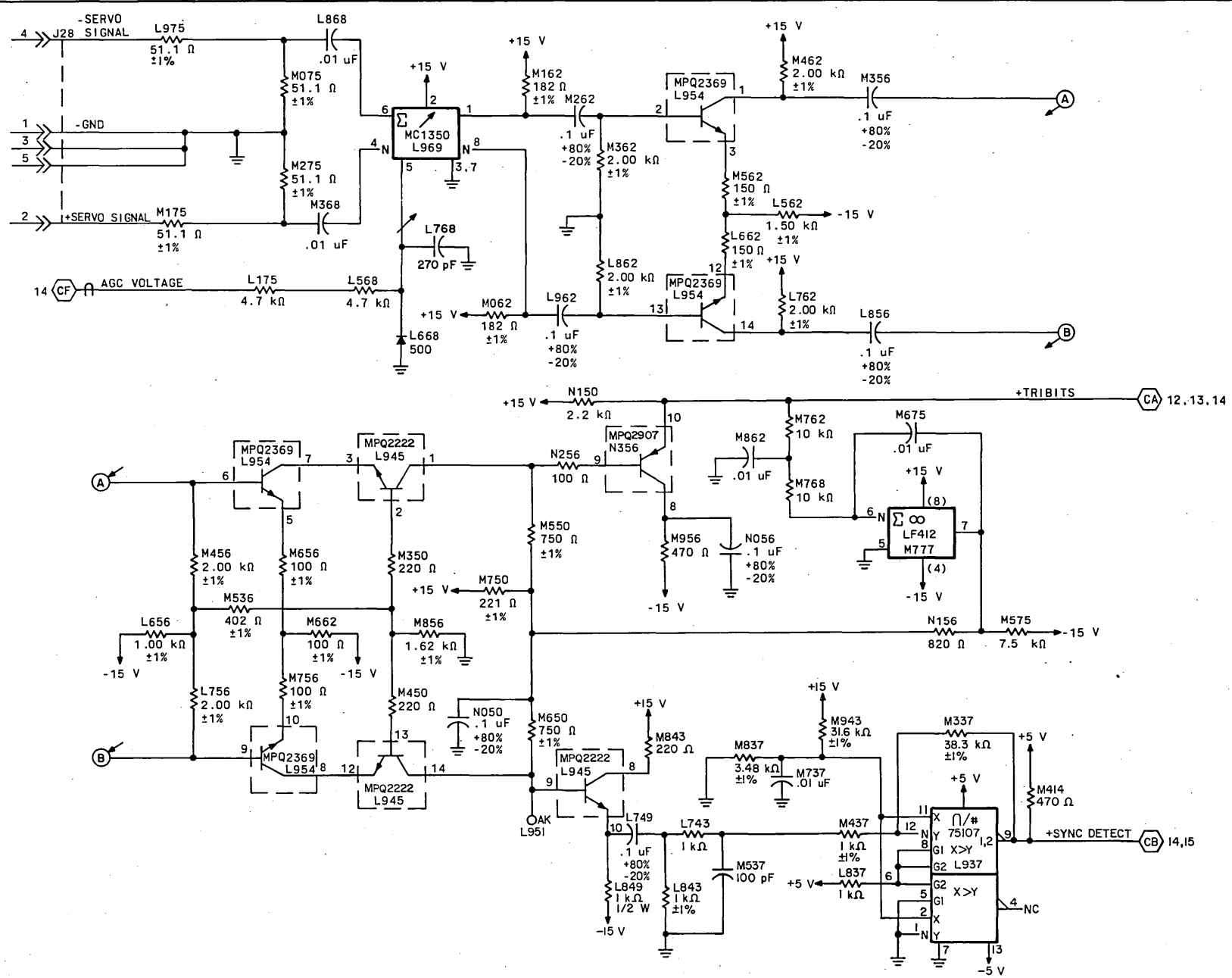
0302 P28-04 04 ->> J28
0301 P28-01 01 ->> J28
NC - 03 ->> J28
0301 P28-05 05 ->> J28
0302 P28-02 02 ->> J28



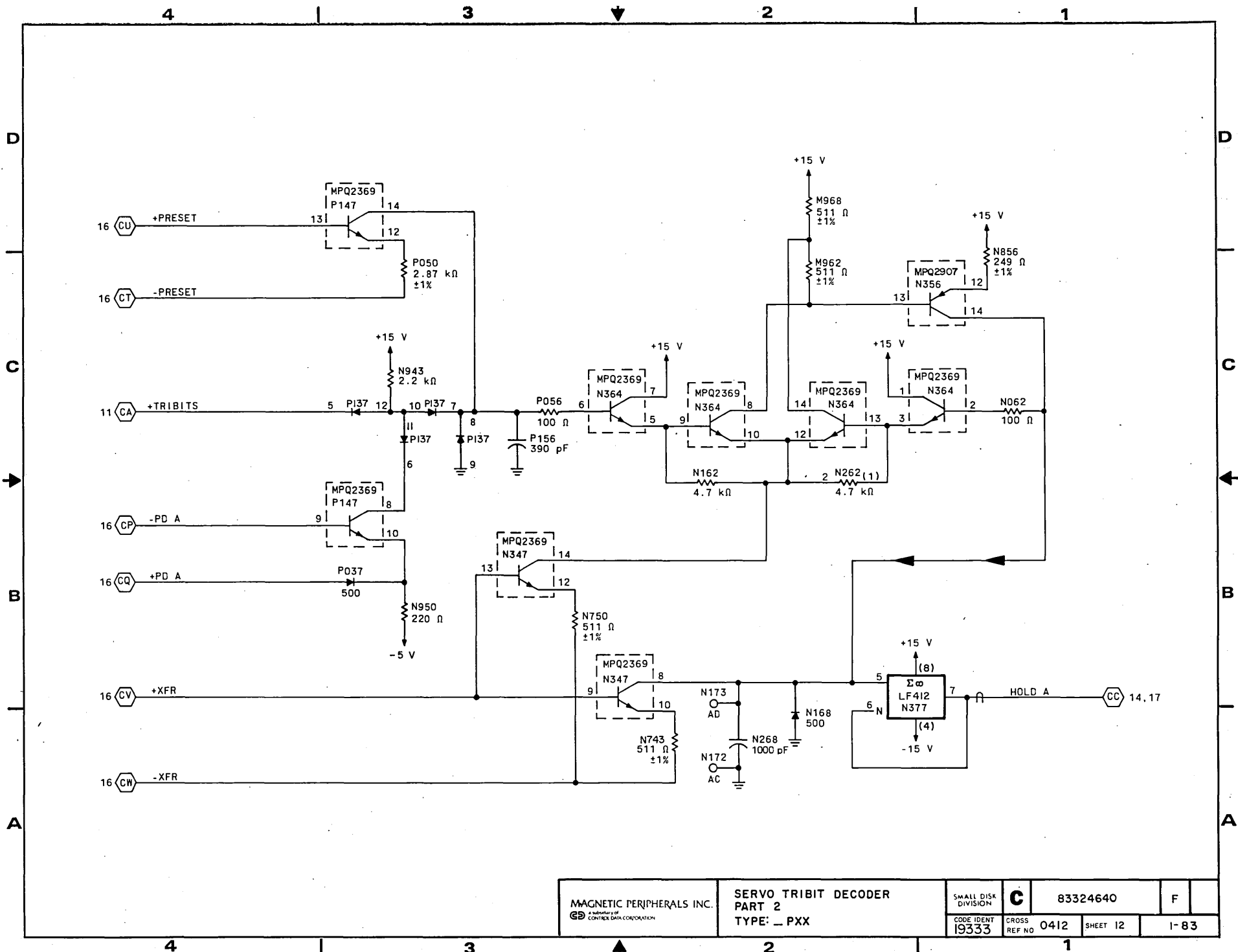
SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

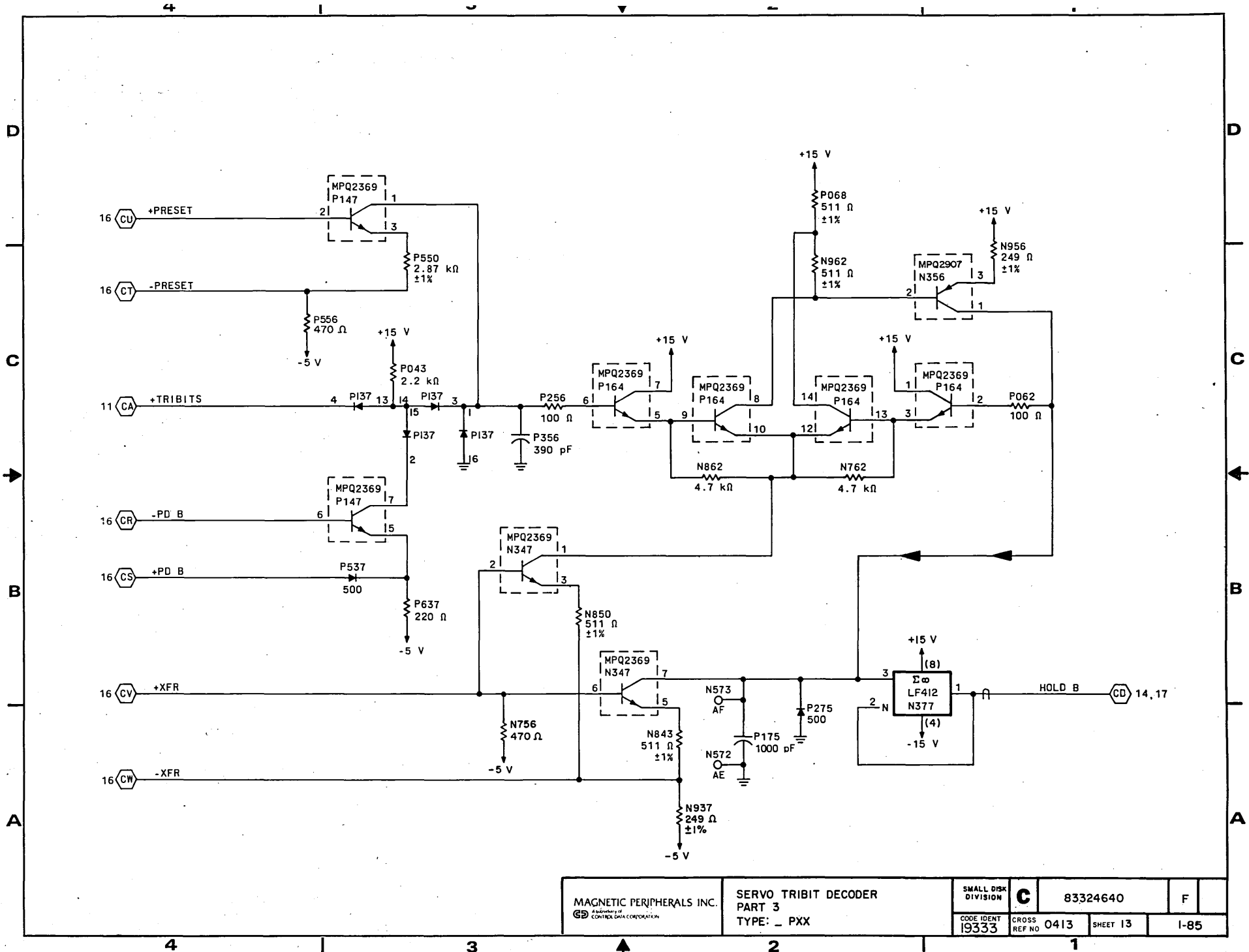
PUB	83324640	REV	B
CROSS REF NO	0411	PAGE	1-80



MAGNETIC PERIPHERALS INC. A subsidiary of CONTROL DATA CORPORATION	SERVO TRIBIT DECODER PART 1 TYPE: - PXX	SMALL DISK DIVISION	C	83324640	F
	CODE IDENT I9333	GROSS REF. NO. 0411	SHEET 11	1-81	



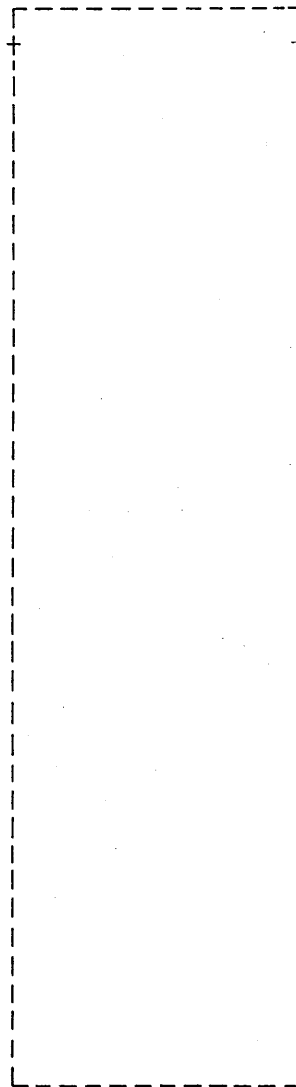
MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> CONTROL DATA CORPORATION	SERVO TRIBIT DECODER PART 2 TYPE: _ PXX		SMALL DISK DIVISION	C	83324640	F
	CODE IDENT I9333	CROSS REF NO	0412	SHEET 12	1-83	



MAGNETIC PERIPHERALS INC. <small>MEMBER OF CONTROL DATA CORPORATION</small>	SERVO TRIBIT DECODER PART 3 TYPE: - PXX		SMALL DISK DIVISION	C	83324640	F
	CODE IDENT 19333	GROSS REF NO 0413	SHEET 13	I-85		

SIGNAL INPUTS

SIGNAL OUTPUTS



J29 >> 17

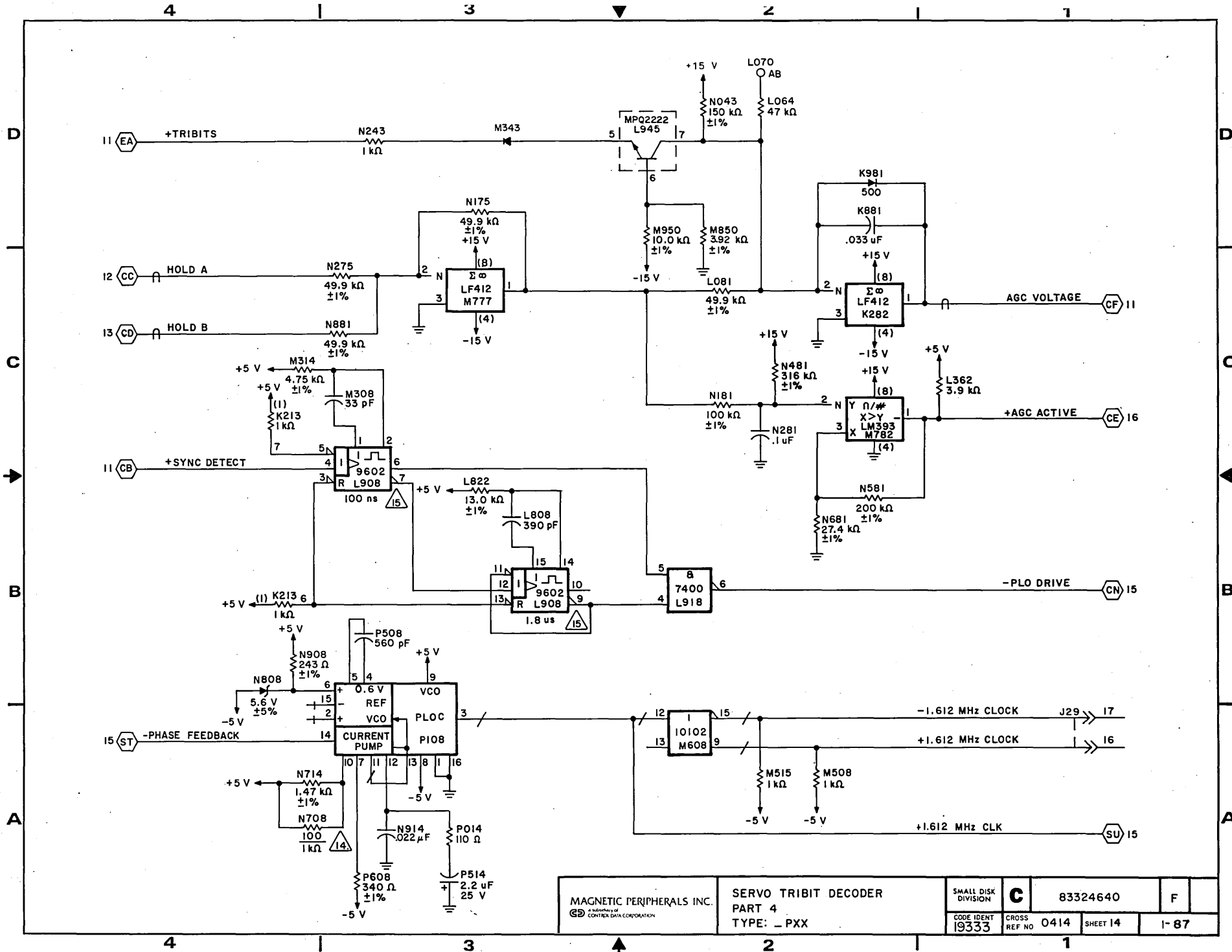
J29 >> 16

- 0703* J31-10
- 0753* J30-10
- 0801* J30-10
- 0703* J31-11
- 0753* J30-11
- 0801* J30-11

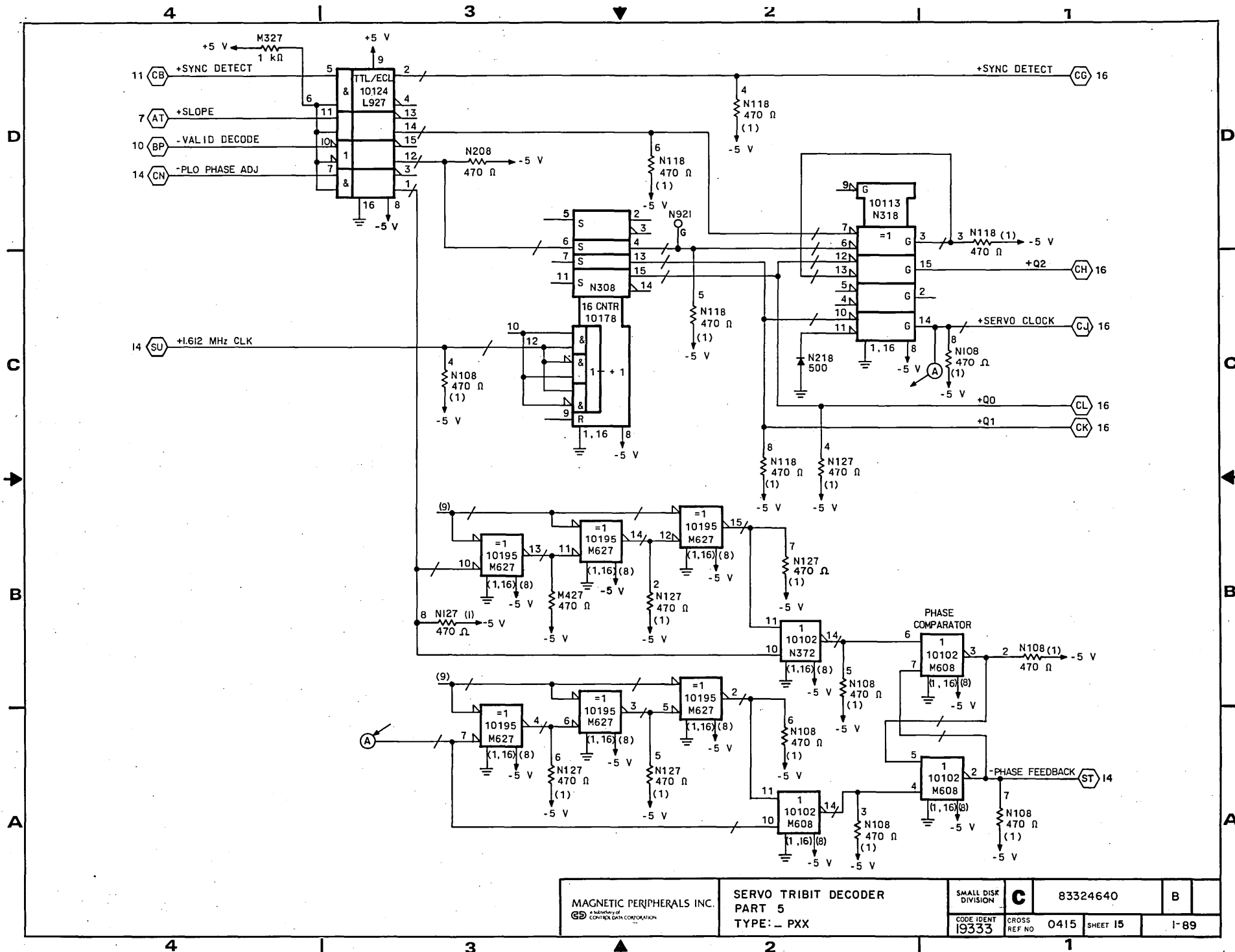
*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

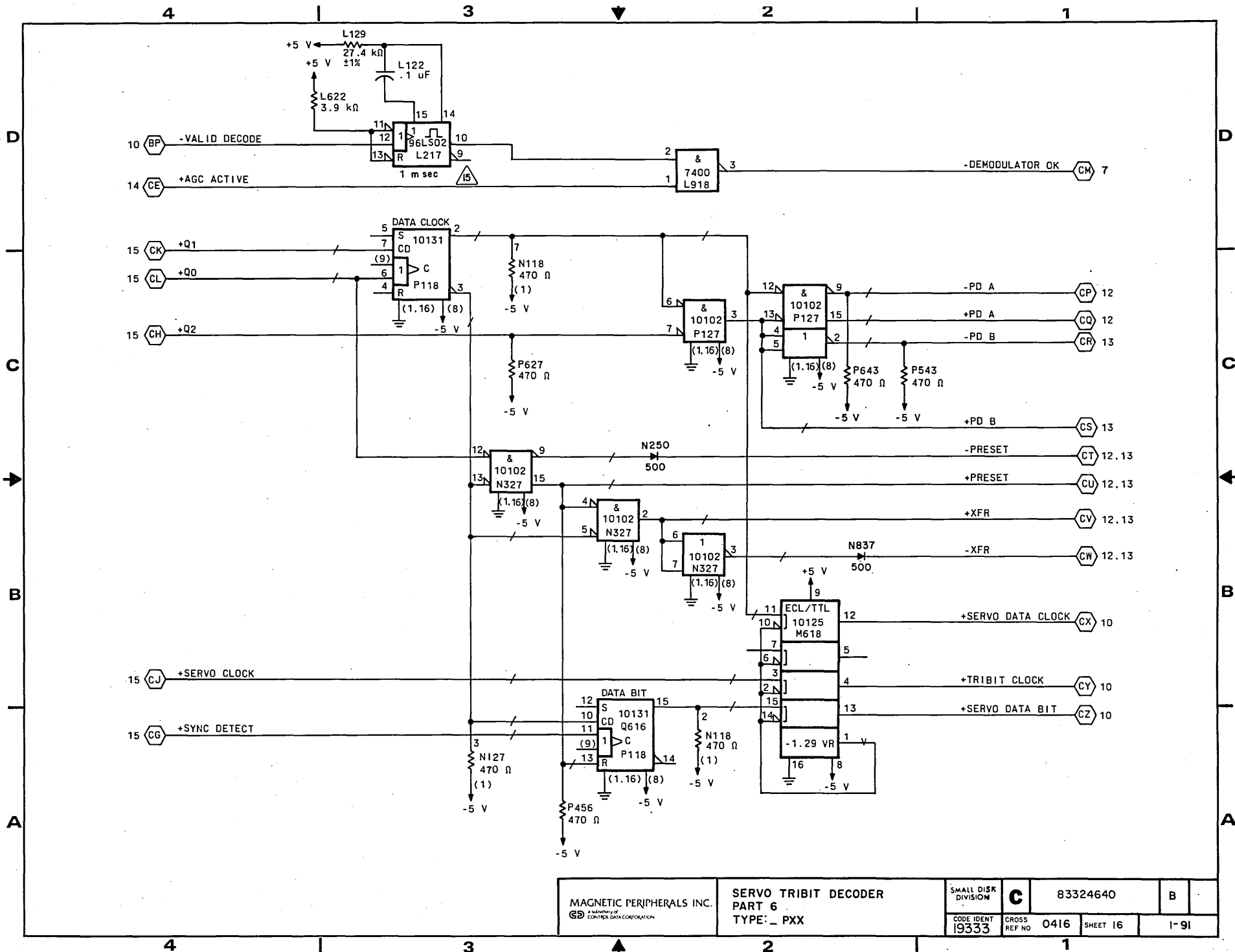
PUB	83324640	REV	H
CROSS REF NO	0414	PAGE	1-86



MAGNETIC PERIPHERALS INC. <small>a subsidiary of CONTECH DATA CORPORATION</small>		SERVO TRIBIT DECODER PART 4 TYPE: - PXX		SMALL DISK DIVISION	C	83324640	F
CODE IDENT 19333	CROSS REF NO	0414	SHEET 14	1-87			



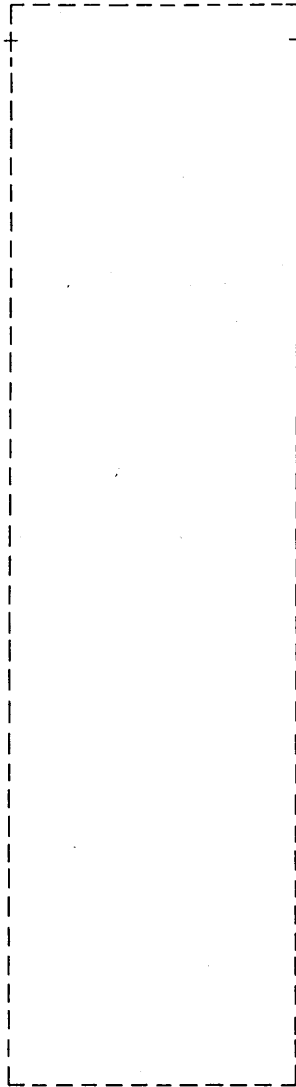
MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> <small>GE</small> CONTROL DATA CORPORATION	SERVO TRIBIT DECODER PART 5 TYPE: - PXX		SMALL DISK DIVISION C	83324640	B
	CODE IDENT I9333	CROSS REF NO 0415	SHEET 15	1-89	



MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> GE CONTROL DATA CORPORATION	SERVO TRIBIT DECODER PART 6 TYPE: PXX		SMALL DISK DIVISION	C	83324640	B
	CODE IDENT 19333	CROSS REF NO	0416	SHEET 16	I-91	

SIGNAL INPUTS

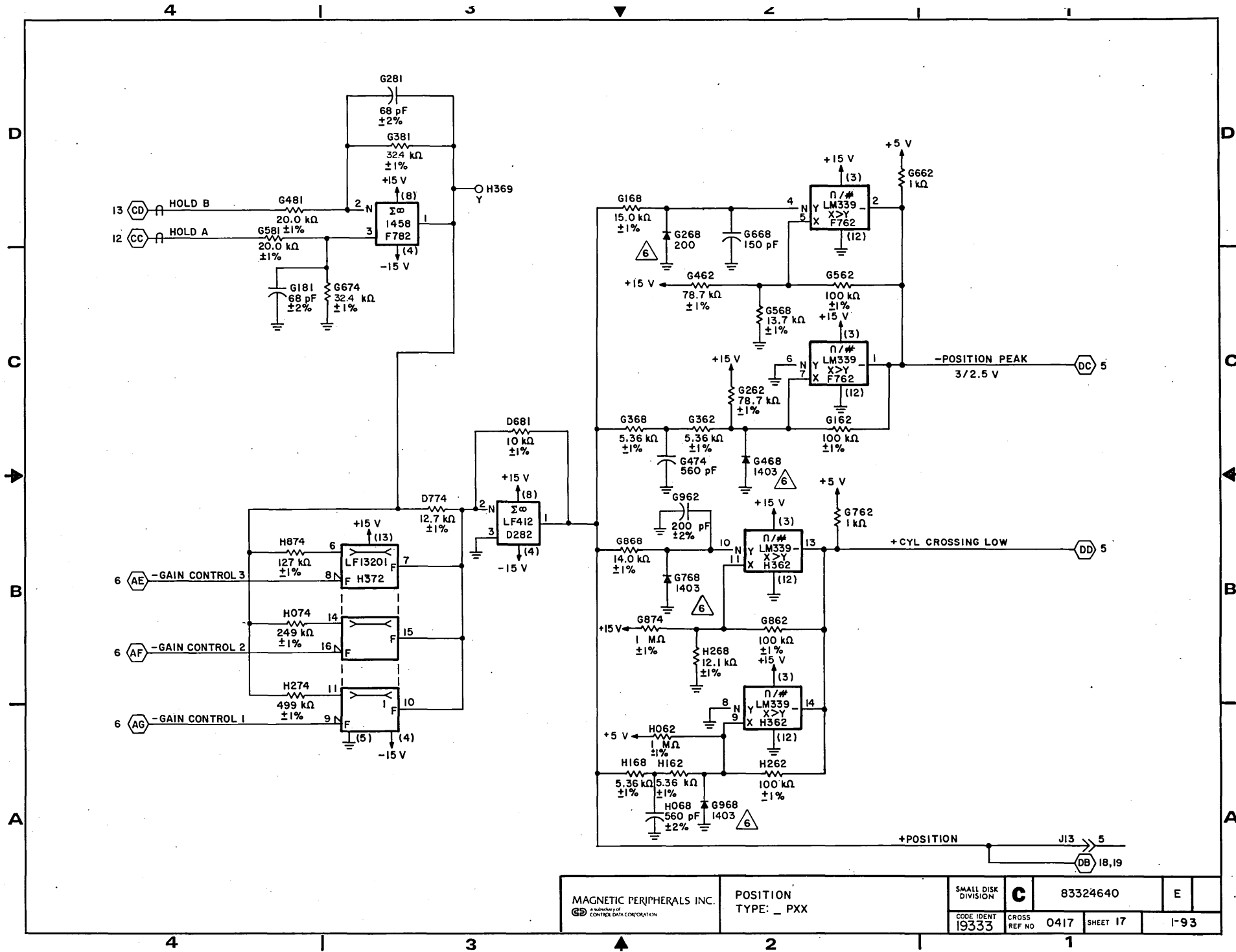
SIGNAL OUTPUTS



J13 >> 05 Servo Test Jack

LOGIC CROSS REFERENCE INFORMATION

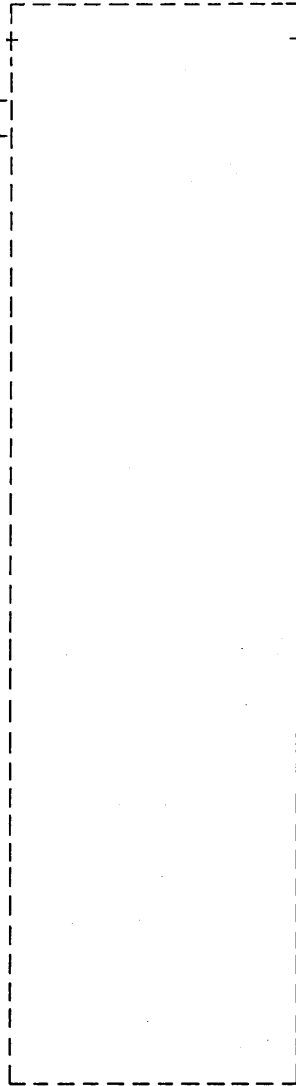
PUB	83324640	REV	B
CROSS REF NO	0417	PAGE	1-92



MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> CONTROL DATA CORPORATION	POSITION TYPE: PXX	SMALL DISK DIVISION	C	83324640	E
	CODE IDENT 19333	CROSS REF NO	0417	SHEET 17	1-93

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0206	J20-40	0212	J20-01	40	>> J14
0206	J20-38	0212	J20-03	39	>> J14

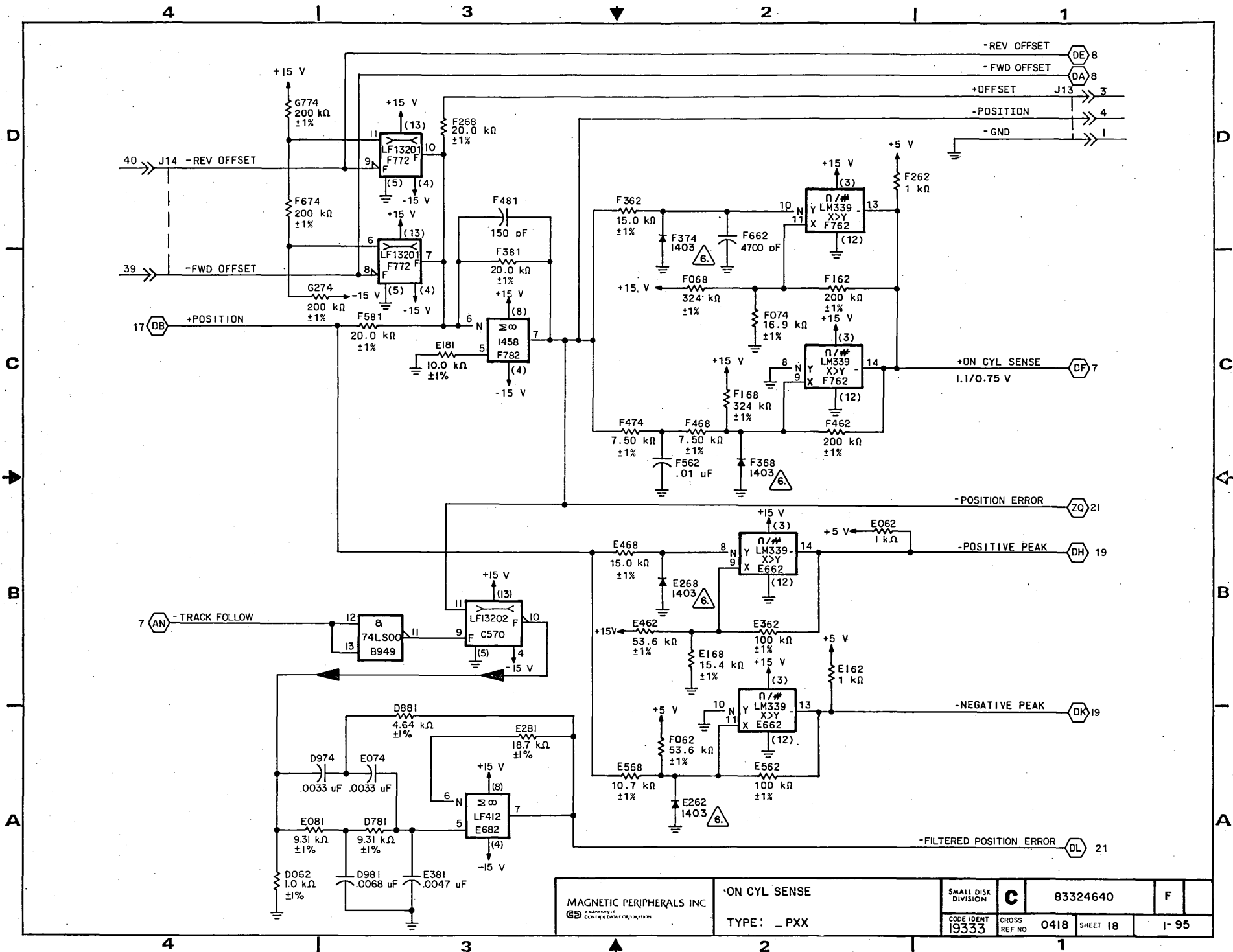


SIGNAL OUTPUTS

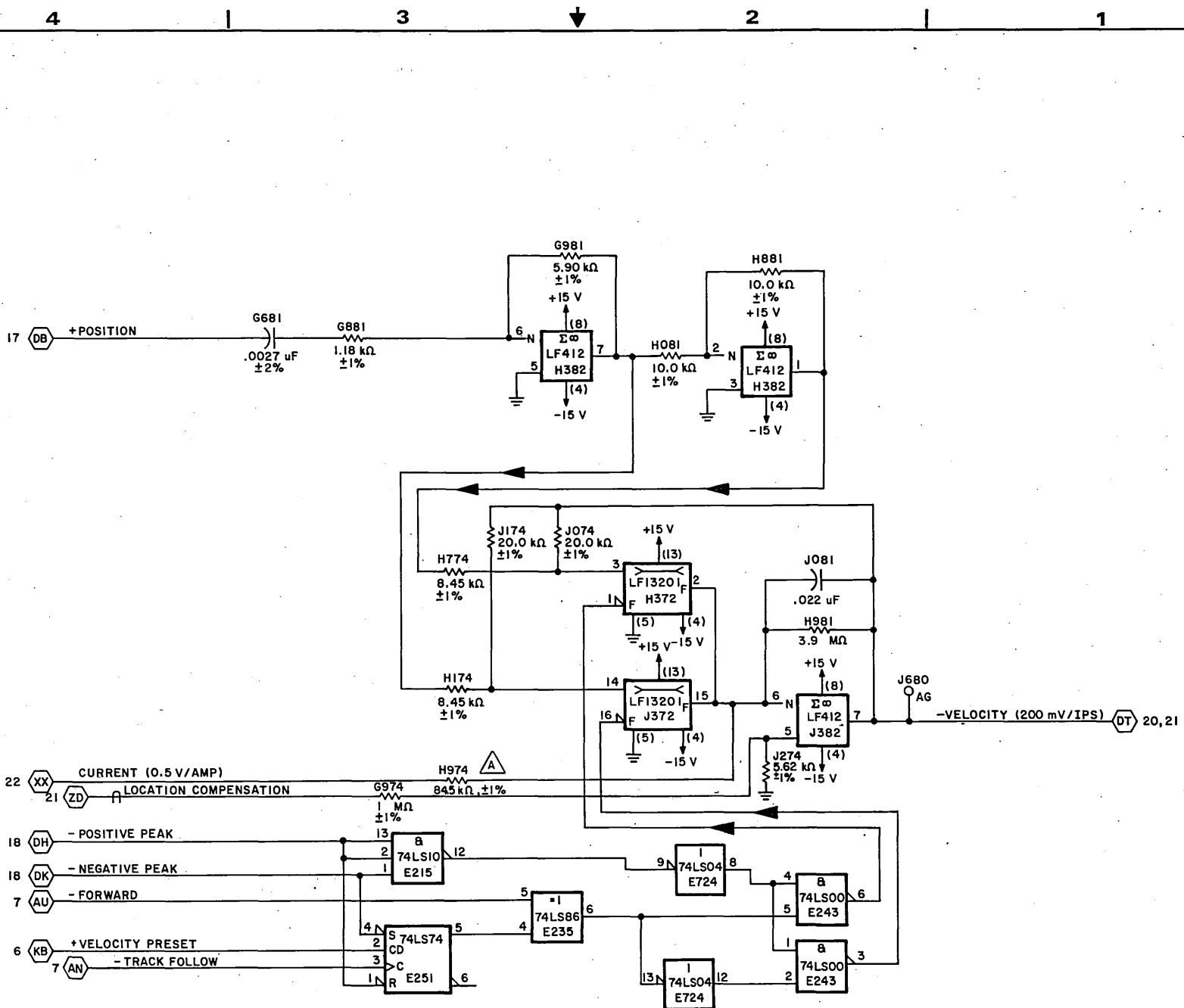
J13	>>	03	Servo Test Jack
J13	>>	04	Servo Test Jack
J13	>>	01	Servo Test Jack

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640	REV	B
CROSS REF NO	0418	PAGE	1-94	



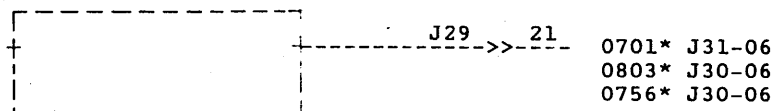
MAGNETIC PERIPHERALS INC. A DIVISION OF GEORGE EASTMAN CORPORATION	ON CYL SENSE TYPE: _ PXX	SMALL DISK DIVISION	C	83324640	F
		CODE IDENT I9333	CROSS REF NO	0418	SHEET 18



NOTES:
 ▲ RESISTOR H974 IS 56.2 kΩ ON CPXX CARD.

SIGNAL INPUTS

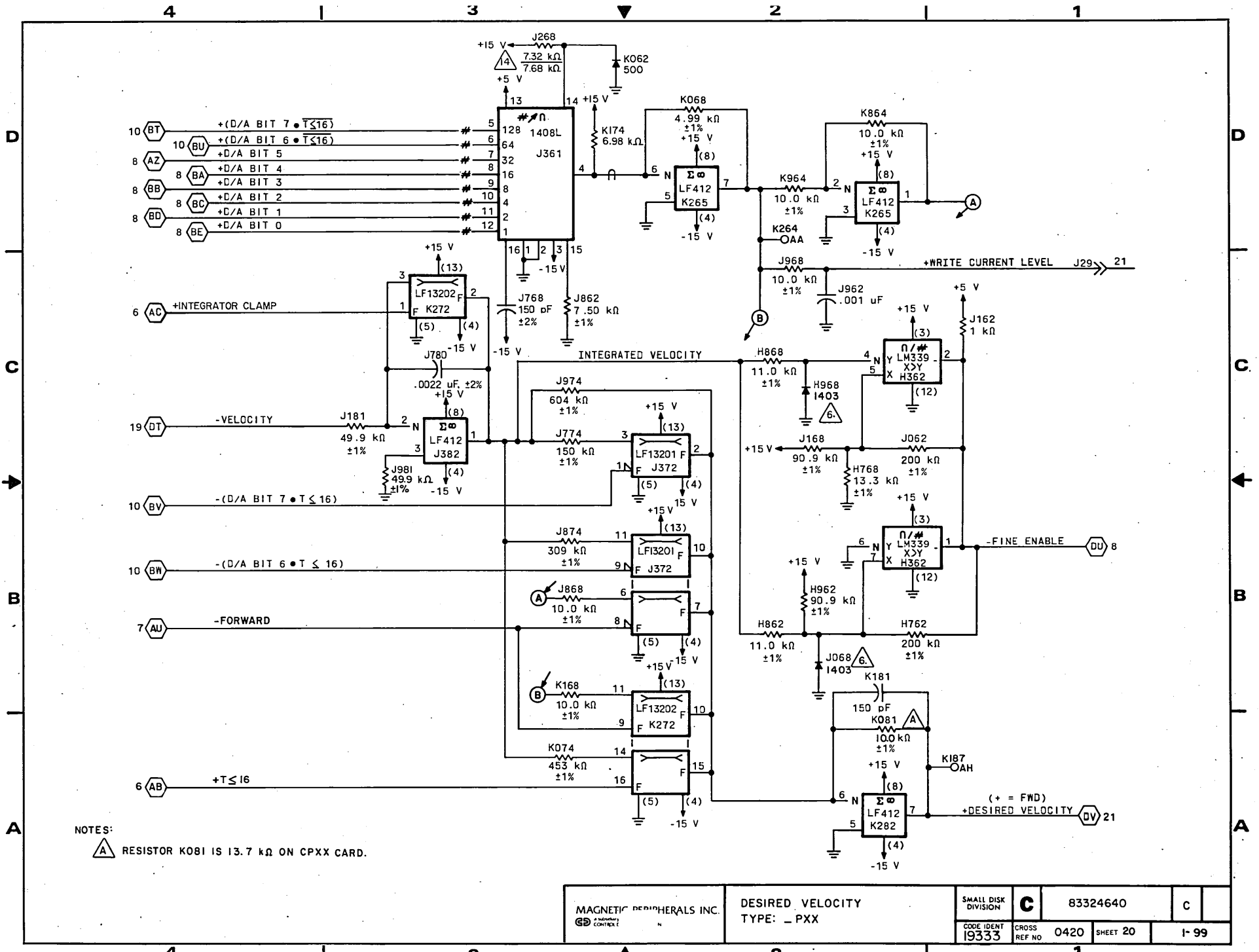
SIGNAL OUTPUTS



*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0420	PAGE	1-98

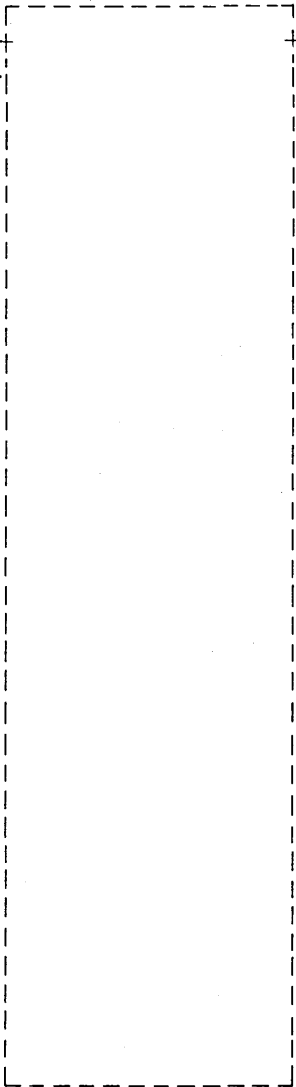


NOTES:
 ⚠️ RESISTOR K081 IS 13.7 kΩ ON CPXX CARD.

MAGNETIC PERIPHERALS INC. <small>CONTRACT</small>	DESIRED VELOCITY TYPE: _ PXX	SMALL DISK DIVISION	C	83324640	C
	CODE IDENT I9333	CROSS REF NO	0420	SHEET 20	1-99

SIGNAL INPUTS

0502 P23-07 ~~07~~ >> ~~J23~~
0502 P23-05 ~~05~~ >> ~~J23~~

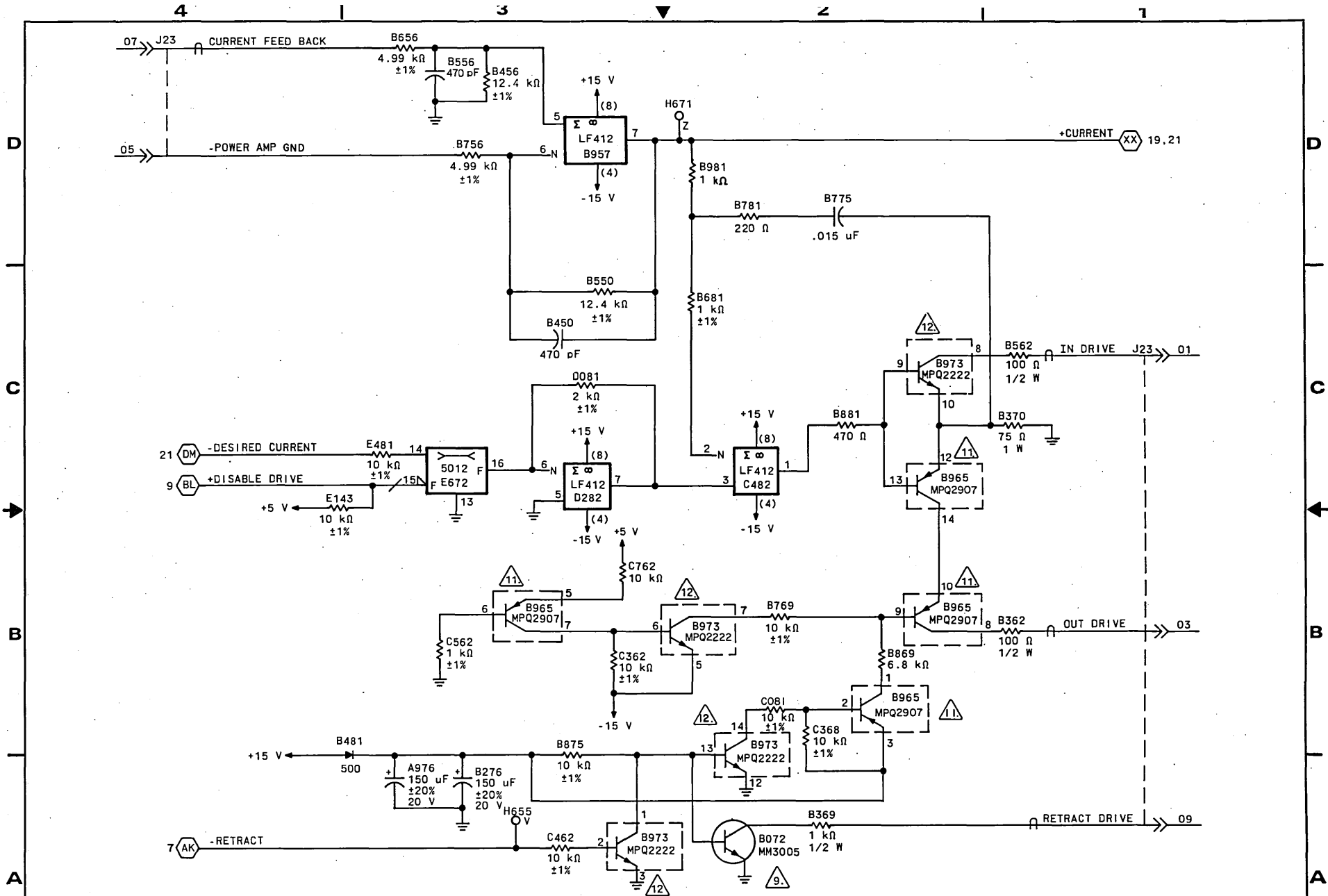


SIGNAL OUTPUTS

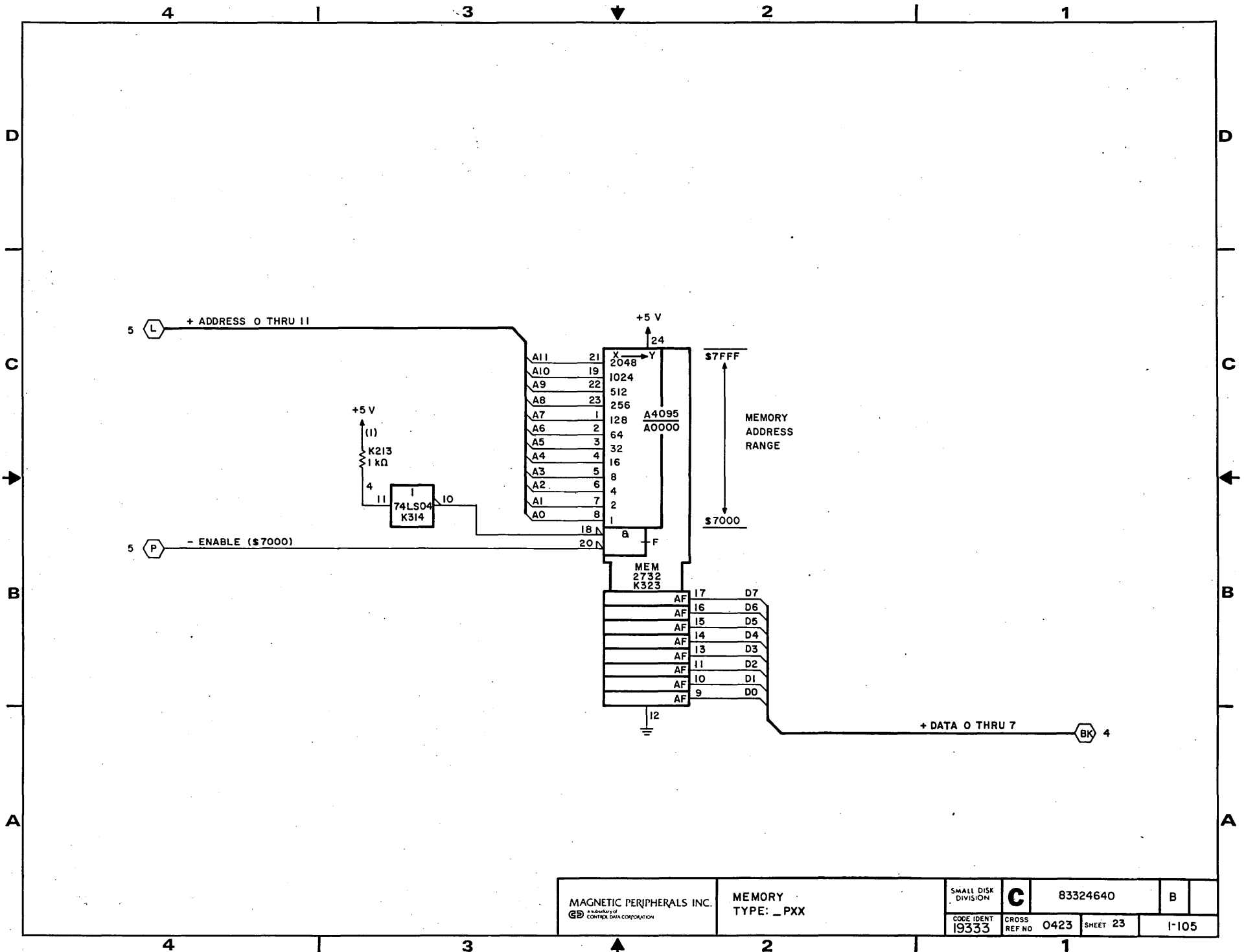
~~J23~~ >> ~~01~~ 0502 P23-01
~~J23~~ >> ~~03~~ 0502 P23-03
~~J23~~ >> ~~09~~ 0502 P23-09

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0422	PAGE	1-102



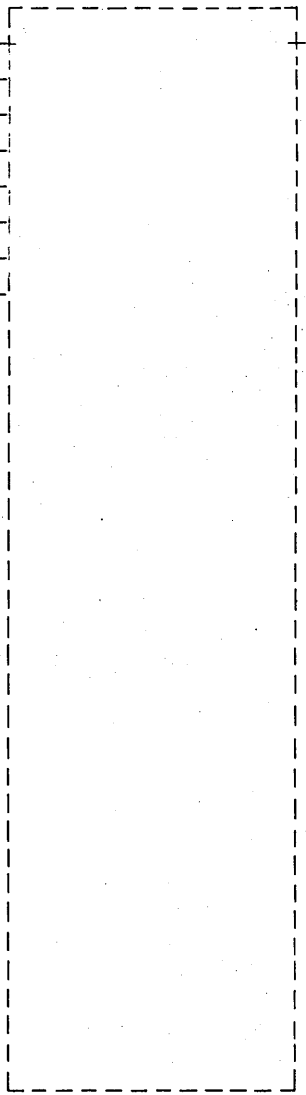
MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> CONTROL DATA CORPORATION	POWER AMP DRIVE TYPE: PXX		SMALL DISK DIVISION C	83324640	B
	CODE IDENT 19333	CROSS REF NO 0422	SHEET 22	1-103	



MAGNETIC PERIPHERALS INC. <small>a subsidiary of</small> GEORGE BROWN DATA CORPORATION	MEMORY TYPE: _PXX		SMALL DISK DIVISION C	83324640	B
	CODE IDENT 19333	CROSS REF NO 0423	SHEET 23	I-105	

SIGNAL INPUTS

1002	P15-11	05	>>	J21
1002	P15-04	07	>>	J21
1002	P15-01	08	>>	J21
1002	P15-02	03	>>	J21
1002	P15-05	04	>>	J21
1002	P15-03	01	>>	J21
1002	P15-06	02	>>	J21
1002	P15-15	06	>>	J21



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0401	PAGE	1-106

UNUSED LOGIC ELEMENTS		
ELEMENT	LOCATION	OUTPUT PINS
* 10102	P127	14
75453	K314	6
7406	E224	4,2
LM339	F125	9,10
74LS20	E851	8
74LS00	E243	3
LM339	E662	1,2
5012	E672	6,11
LM393	H782	7
96LS02	L217	6,7
10125	E715	1,5,12,13
74LS74	E251	1,2
74LS00	B949	8
LF13202	C570	8
74LS00	L918	11
74LS02	K810	1

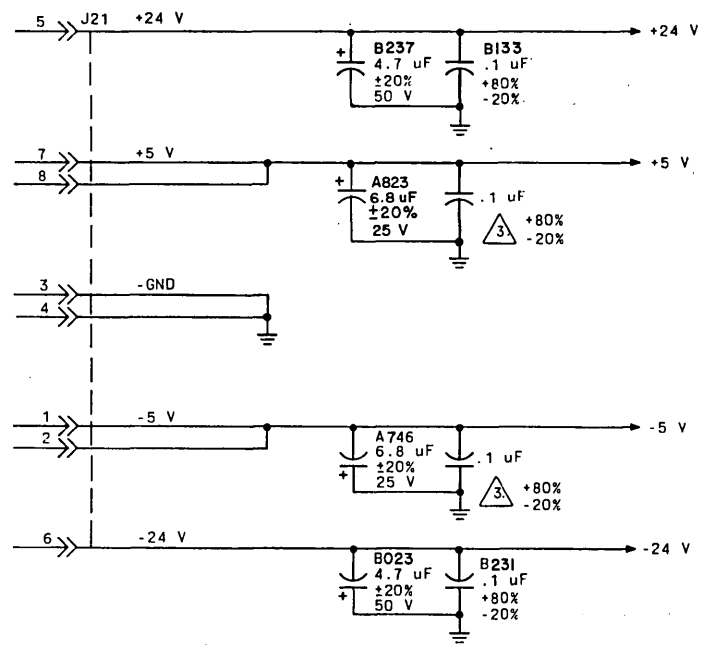
UNUSED RESISTOR PACKS		
VALUE	LOCATION	PIN(S)
470 Ω	N305	2,8
470 Ω	G410	2,3
470 Ω	K213	2,8.5

UNUSED TRANSISTOR PACKS		
ELEMENT	LOCATION	PINS
MPQ2369	C414	1,2,3
MPQ3546	N356	5,6,7

FILTER CAPS			
.1 uF			
+5 V	-5 V	+15 V	-15 V
B316	F115	B650	L556
E116	N008	E581	K664
E615		F681	P075
E625	N018	H281	M868
E634	P520	J281	J762
E643	M527	K681	G174
E752	N027	M681	
G438	N827	N781	D837
G618	P527	M468	C355
K229	N737	P562	D674
H515		C381	C962
J262		D225	H781
L050		B350	
L737			
K158			
L828			
M320			
K715			
J812			
H638			
M408			
L814			
J640			
D162			

PART NO. RANGE
04 THRU 04

REVISION RECORD						
REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
	DJ23000	FOR REVS A-J SEE M-F HIST				
K	DJ28068	ELIMINATE RWK	MJ	6-5-85		
L	DJ28088	CORR -PXX PL/DWG	BJP	9.30.85		
M	DJ28109	CORR -PXX BD BLK	CB	12-13-85		



- 16. DIODE SILICON 24553500.
- 17. ALL ○-○ INDICATE MOLDED JUMPER WIRES.
- 18. DRAWINGS WHERE TAB NUMBERS CREATE NEW COVER SHEET, TABS 00-99 ARE RESERVED.

- NOTES:
1. UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GROUND, AND PIN 14 CONNECTED TO +5 V.
ALL 16 PIN IC'S HAVE PIN 8 CONNECTED TO GROUND, AND PIN 16 CONNECTED TO +5 V.
ALL DIODES 15165580
 2. UNUSED TTL LOGIC ELEMENTS GROUNDED EXCEPT FOR X.
 3. SEE TABLE FOR .1 uF FILTER CAP LOCATIONS.
 4. FOR EASE OF LOCATING WHICH PAGE A CONNECTOR PIN IS ON, SEE PIN/SHEET CROSS REFERENCE DIAGRAMS ON SHEET 2.
 5. DIODE, SILICON, 1N4001, 95637301.
 6. DIODE, SCHOTTKY, 50241403.
 7. DIODE, SILICON, 50240107.
 8. DIODE, SILICON 50240113.
 9. TRANSISTOR, SNPN, 50222500.
 10. TRANSISTOR, SPNP, 50222402.
 11. TRANSISTOR ARRAY, QUAD PNP, 50212700.
 12. TRANSISTOR ARRAY, QUAD NPN, 50212600.
 13. TRANSISTOR ARRAY, MPQ, 50212700.
 14. TEST SELECT RESISTORS TO BE SELECTED FROM DRAWING 94357500 AND INSERTED DURING CARD TEST PER CARD TEST REQUIREMENTS.
 15. DELAY TIME FOR REFERENCE ONLY

REFERENCE DRAWING		MAGNETIC PERIPHERALS INC.		TITLE	
COMP ASSY 54338904		GSD A member of CONTROL DATA CORPORATION		SCHEMATIC DIAGRAM	
CTR 54339104		FIRST USED ON	NEXT ASSEMBLY	TYPE EPXX (REV AM & ABV)	
COMPONENTS, EXCEPT AS NOTED		DWN	CHKD	DRAWING NO	
TOLERANCE	VALUE	RATING			
RES ± 5%	OHMS	1/4 W	ENGR	TWIN CITIES DISK DIVISION	
CAP ±10%			MFG	C 83324640 H	
			QA	SCALE	
				O401 SHEET 1 OF 23 1-106.1	

B54339004A

SIGNAL INPUTS

0102 P26-11 11-->> J26

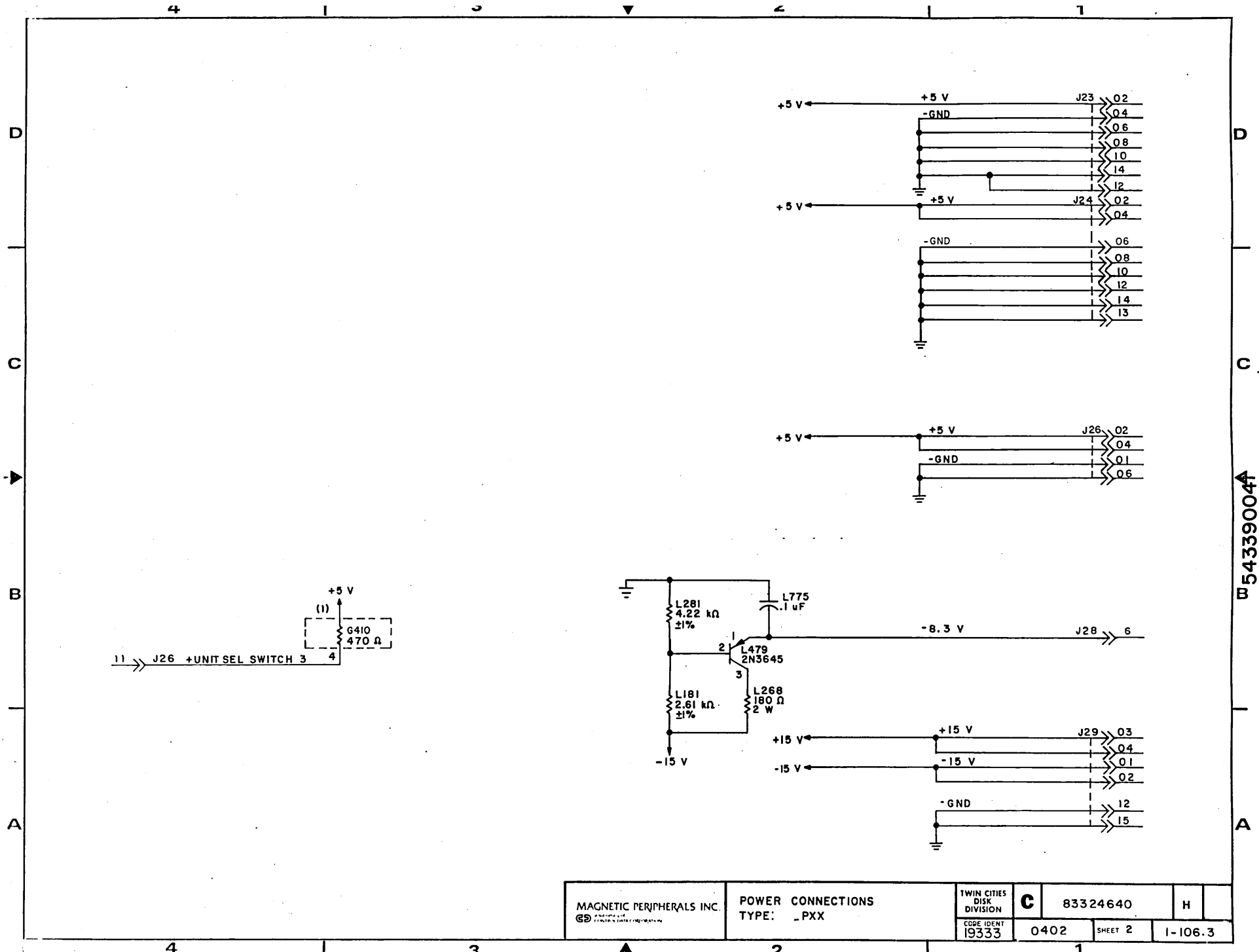
SIGNAL OUTPUTS

J23 >> 02	0501 P23-02
J23 >> 04	0502 P23-04
J23 >> 06	0502 P23-06
J23 >> 08	0502 P23-08
J23 >> 10	0502 P23-10
J23 >> 14	0502 P23-14
J23 >> 12	NC -
J24 >> 02	0601 P24-02
J24 >> 04	0601 P24-04
J24 >> 06	0602 P24-06
J24 >> 08	0601 P24-08
J24 >> 10	0601 P24-10
J24 >> 12	0601 P24-12
J24 >> 14	0601 P24-14
J24 >> 13	0603 P24-13
J26 >> 02	0101 P26-02
J26 >> 04	0101 P26-04
J26 >> 01	0101 P26-01
J26 >> 06	0101 P26-06
J14 >> 38	0202 J20-36
J28 >> 06	0301 P28-06
J29 >> 03	0801* J30-24
	0701* J31-24
	0751* J30-24
J29 >> 04	0801* J30-23
	0701* J31-23
	0751* J30-23
J29 >> 01	0801* J30-26
	0701* J31-26
	0751* J30-26
J29 >> 02	0801* J30-25
	0701* J31-25
	0751* J30-25
J29 >> 12	0801* J30-15
	0701* J31-15
	0751* J30-15
J29 >> 15	0801* J30-12
	0701* J31-12
	0751* J30-12

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0402	PAGE	1-106.2

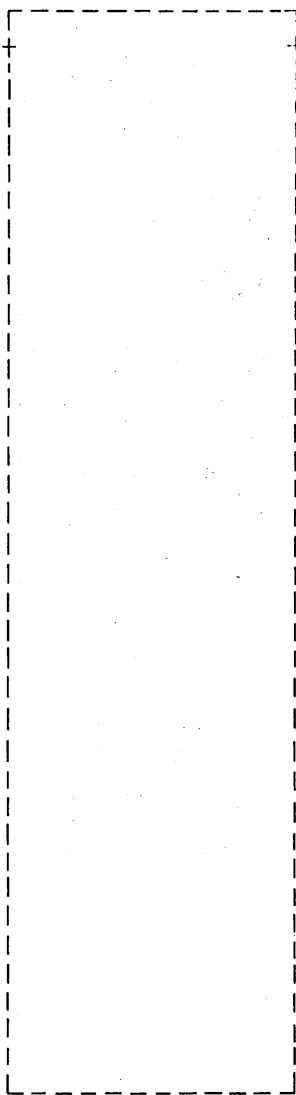


54339004

MAGNETIC PERIPHERALS INC. G.D. CORPORATION	POWER CONNECTIONS TYPE: _PXX	TWIN CITIES DISK DIVISION	C	83324640	H	
		CODE IDENT 19333				

SIGNAL INPUTS

SIGNAL OUTPUTS

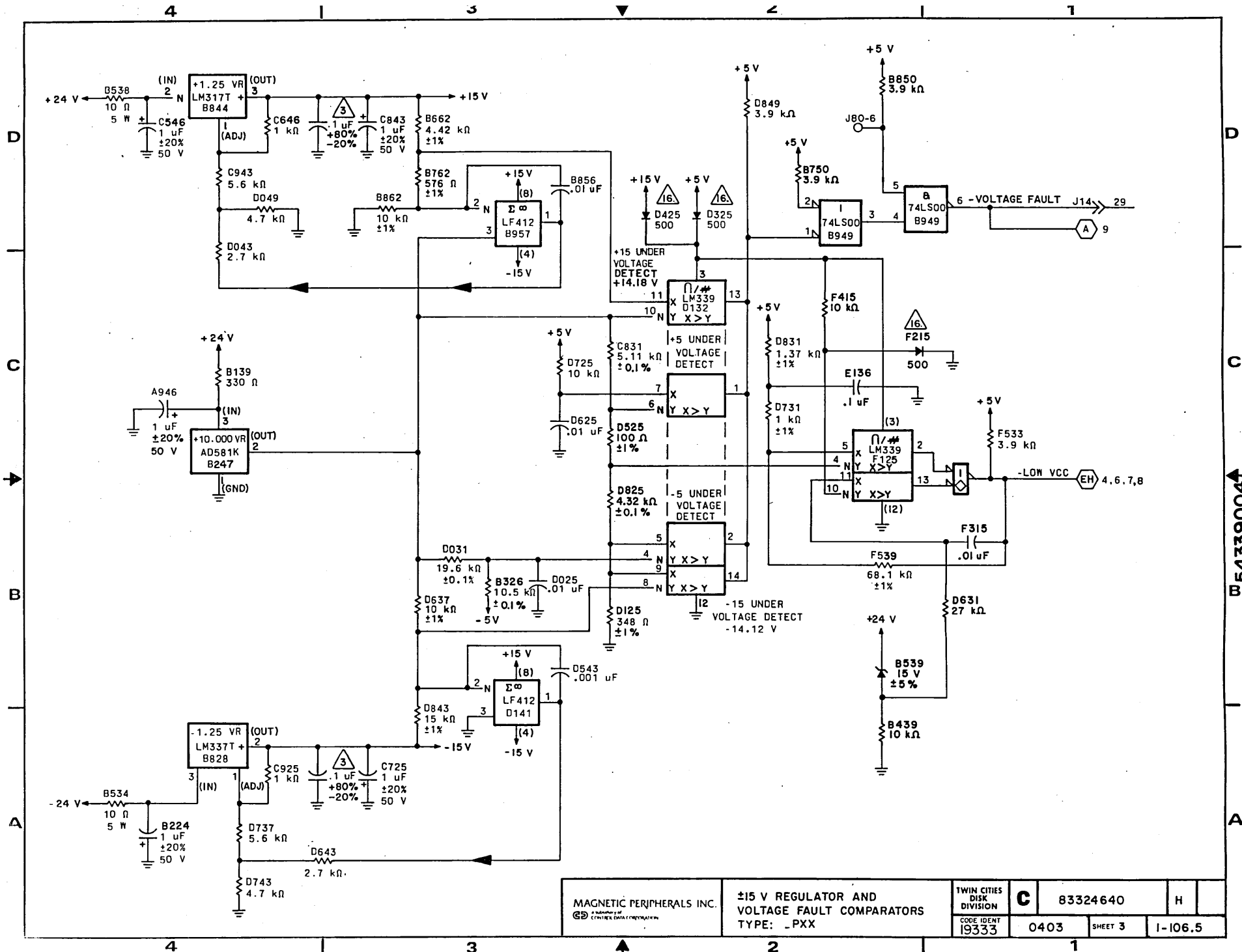


J14 >> 29

<u>SINGLE</u>	<u>DUAL</u>
<u>CHANNEL UNITS</u>	<u>CHANNEL UNITS</u>
0206 J20-18	0212 J20-23

LOGIC CROSS REFERENCE INFORMATION

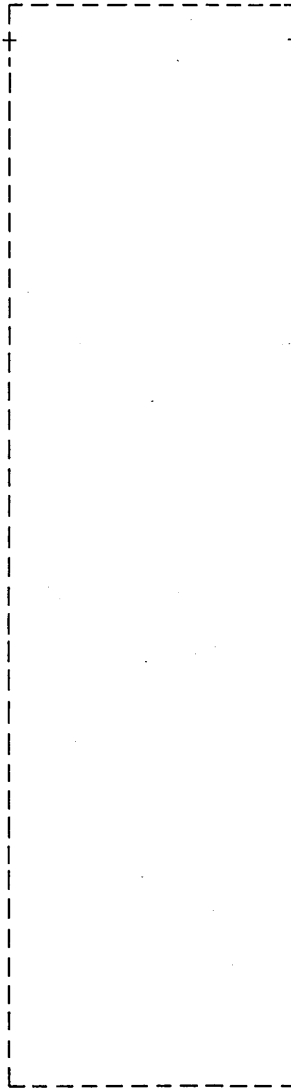
PUB	83324640	REV	H
CROSS REF NO	0403	PAGE	1-106.4



MAGNETIC PERIPHERALS INC. <small>© CONSUMER DATA CORPORATION</small>	±15 V REGULATOR AND VOLTAGE FAULT COMPARATORS TYPE: PXX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0403	SHEET 3	I-106.5		

B 54339004

SIGNAL INPUTS



SIGNAL OUTPUTS

		<u>SINGLE</u>	<u>DUAL</u>
		<u>CHANNEL UNITS</u>	<u>CHANNEL UNITS</u>
J14	>> 21	0206 J20-02	0210 J20-39
J24	>> 05	0602 P24-05	0602 P24-05

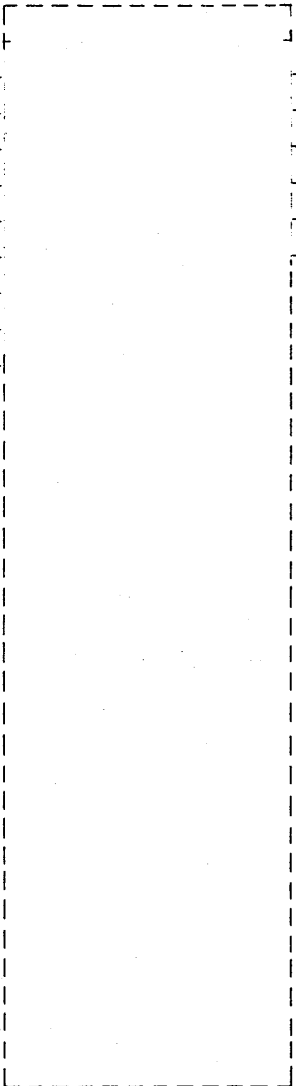
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0404	PAGE	1-106.6

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS	
----------------------	--	--------------------	--

0202	J20-11	0202	J20-30	15	>>	J14
0202	J20-05	0202	J20-36	18	>>	J14
0202	J20-07	0202	J20-34	17	>>	J14
0202	J20-13	0202	J20-28	14	>>	J14
0202	J20-15	0202	J20-26	13	>>	J14
0202	J20-19	0202	J20-22	11	>>	J14
0102	P26-05	0102	P26-05	05	>>	J26
0102	P26-03	0102	P26-03	03	>>	J26
0102	P26-09	0102	P26-09	09	>>	J26



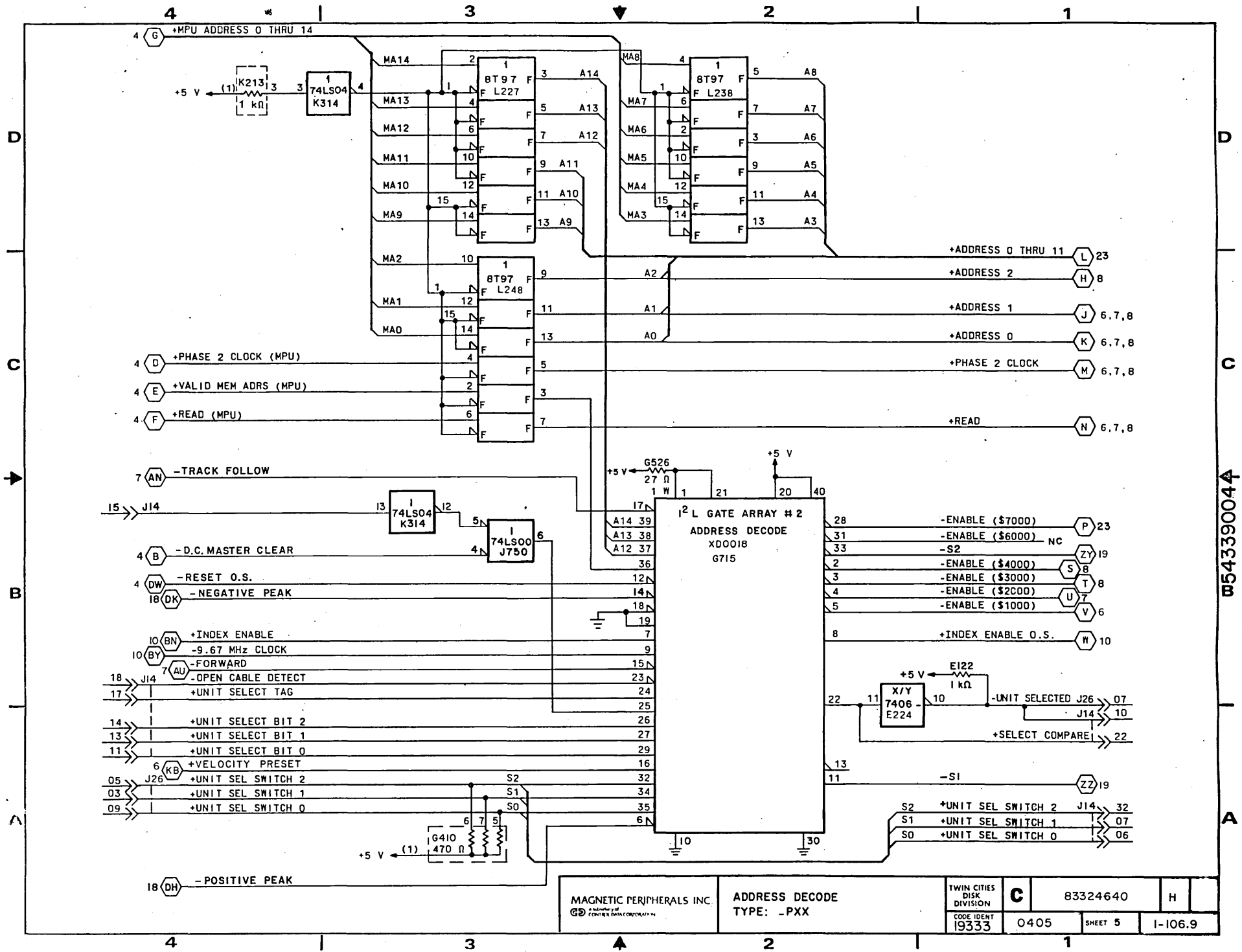
SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS	
----------------------	--	--------------------	--

J26	>>	07	0102	P26-07	0102	P26-07
J14	>>	10	0202	J20-21	0210	J20-20
J14	>>	22	NC	J20-04	0204	J20-37
J14	>>	32	NC	J20-24	0210	J20-17
J14	>>	07	NC	J20-27	0210	J20-14
J14	>>	06	NC	J20-29	0210	J20-12

LOGIC CROSS REFERENCE INFORMATION

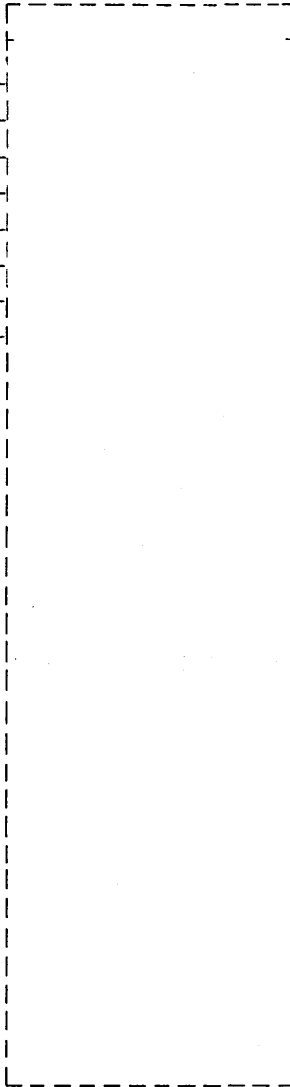
PUB		REV	
83324640		H	
CROSS REF NO	PAGE		
0405	1-106.8		



W543390044

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0206	J20-26	0212	J20-15	33	J14
0206	J20-39	0212	J20-02	01	J14
0206	J20-28	0212	J20-13	34	J14
0206	J20-10	0212	J20-31	25	J14
0206	J20-37	0212	J20-04	02	J14
0206	J20-35	0212	J20-06	03	J14
0206	J20-33	0212	J20-08	04	J14
0206	J20-31	0212	J20-10	05	J14



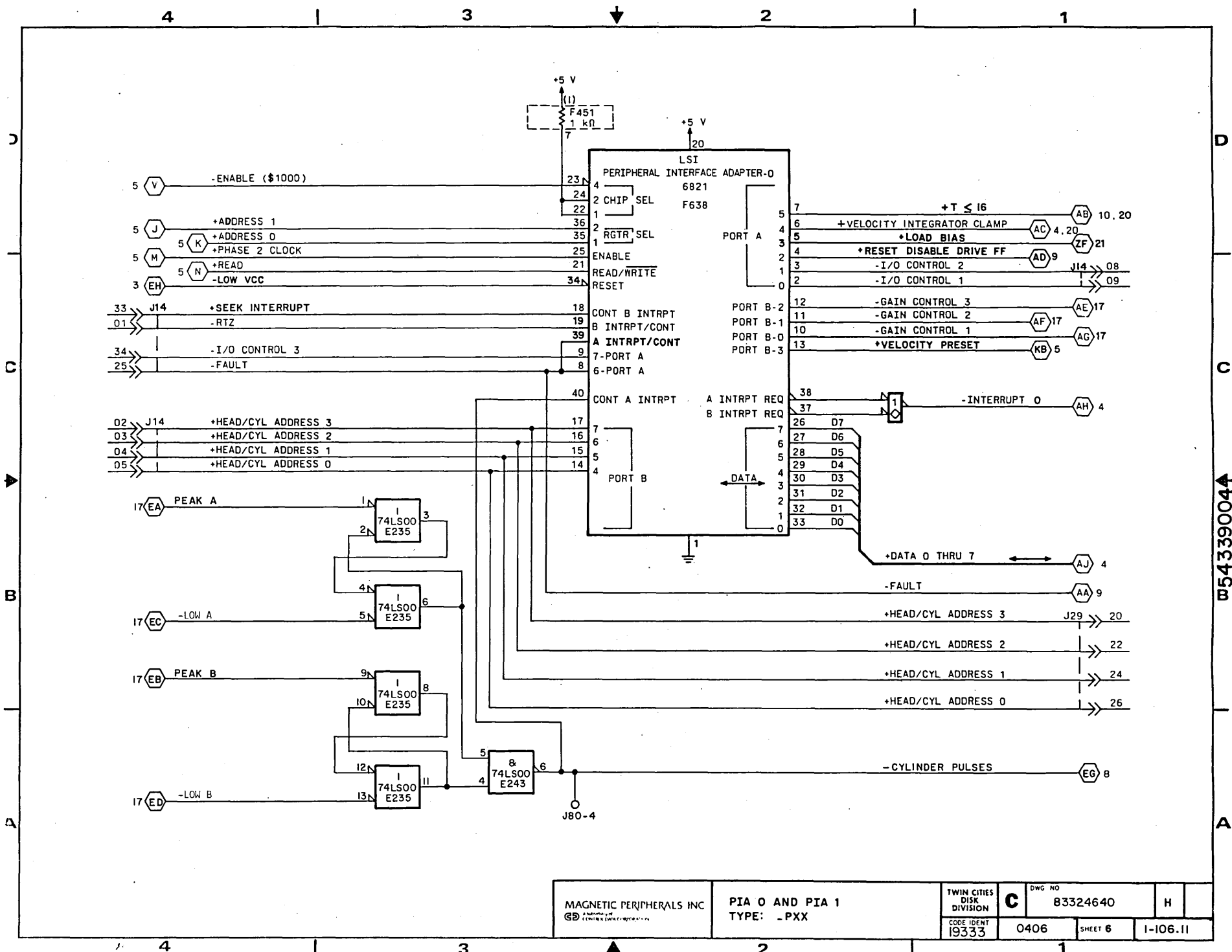
SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0206	J20-25	0212	J20-16	J14	08
0206	J20-23	0212	J20-18	J14	09
0701*	J31-07	0701*	J31-07	J29	20
0805*	J30-07	0805*	J30-07		
0756*	J30-07	0756*	J30-07		
0701*	J31-05	0701*	J31-05	J29	22
0805*	J30-05	0805*	J30-05		
0756*	J30-05	0756*	J30-05		
0701*	J31-03	0701*	J31-03	J29	24
0805*	J30-03	0805*	J30-03		
0756*	J30-03	0756*	J30-03		
0701*	J31-01	0701*	J31-01	J29	26
0805*	J30-01	0805*	J30-01		
0756*	J30-01	0756*	J30-01		

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0406	PAGE 1-106.10	

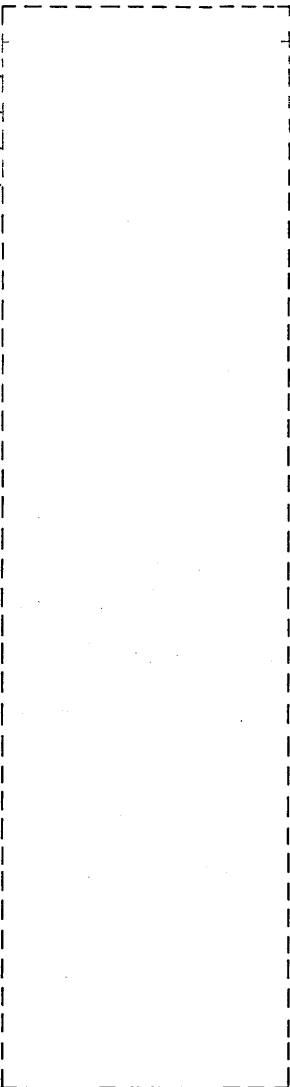


MAGNETIC PERIPHERALS INC GD	PIA 0 AND PIA 1 TYPE: -PXX	TWIN CITIES DISK DIVISION	DWG NO 83324640	H
		CODE IDENT 19333	0406	SHEET 6

W54339004A

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0602	P24-09	0602	P24-09	09	>> J24
0102	P26-08	0102	P26-08	08	>> J26
0205	J20-20	0205	J20-21	30	>> J14
NC	J20-16	NC	J20-25	28	>> J14



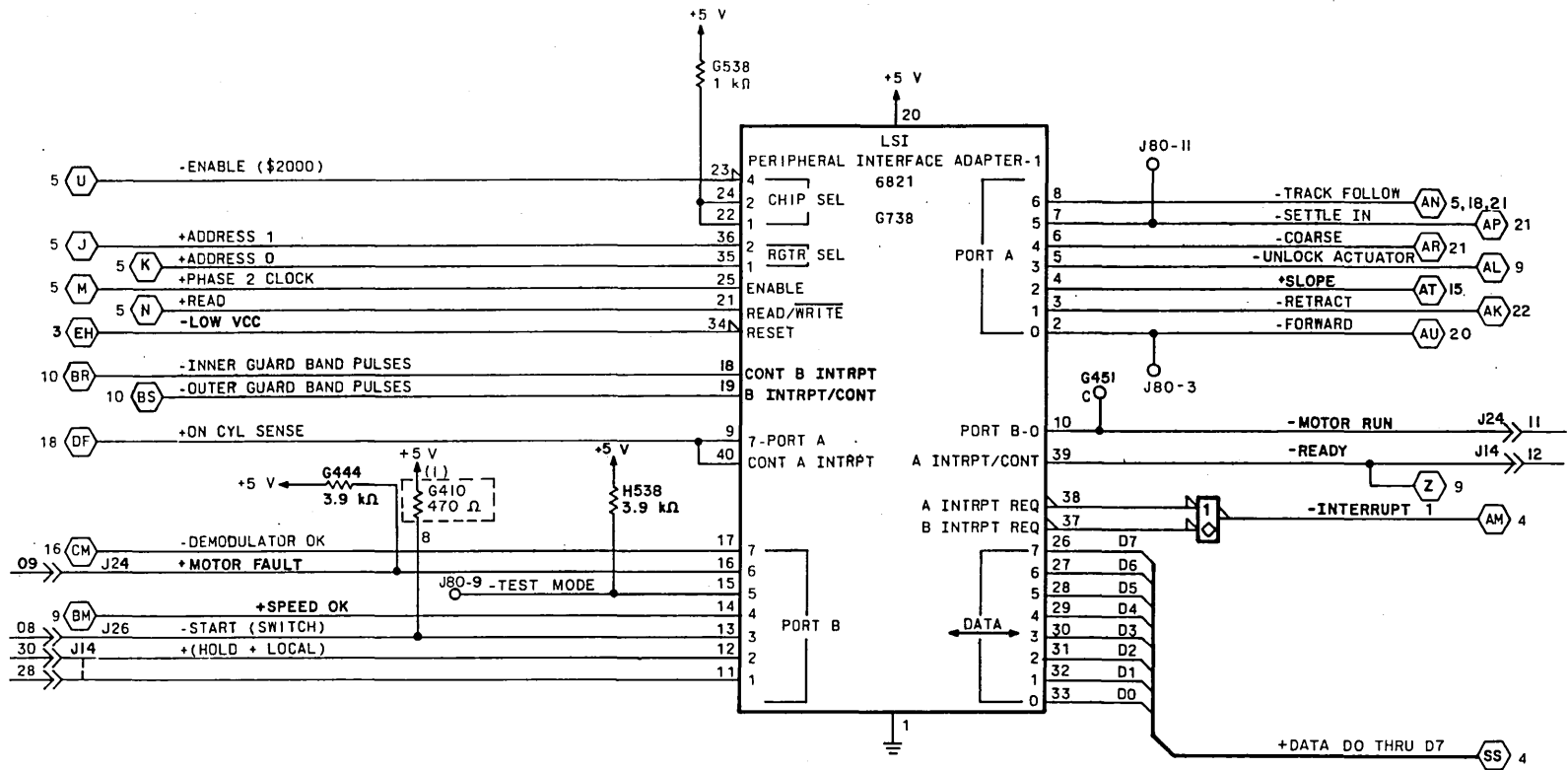
SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0602	P24-11	0602	P24-11	J24	>> 11
0207*	J20-17	0204	J20-24	J14	>> 12

*0204 on B/C/E/FEBN boards.

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0407	PAGE 1-106.12	



D
C
B
A

D
C
B
A

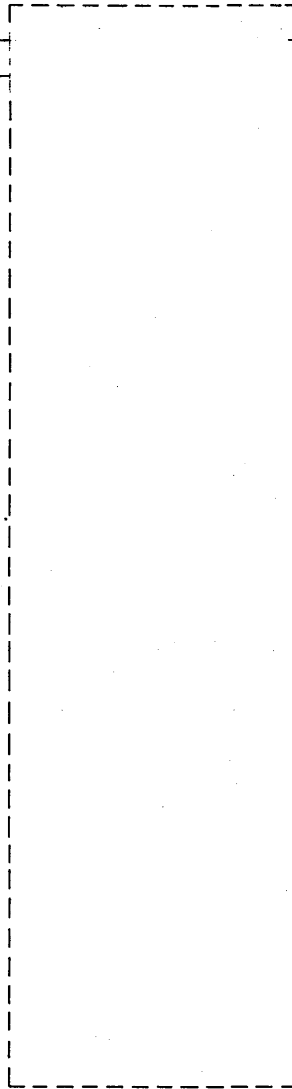
54339004

MAGNETIC PERIPHERALS INC GD	PIA 0 AND PIA 1 TYPE: _PXX	TWIN CITIES DISK DIVISION	C	83324640	H
		CODE IDENT 19333			

4 | 3 | 2 | 1

SIGNAL INPUTS

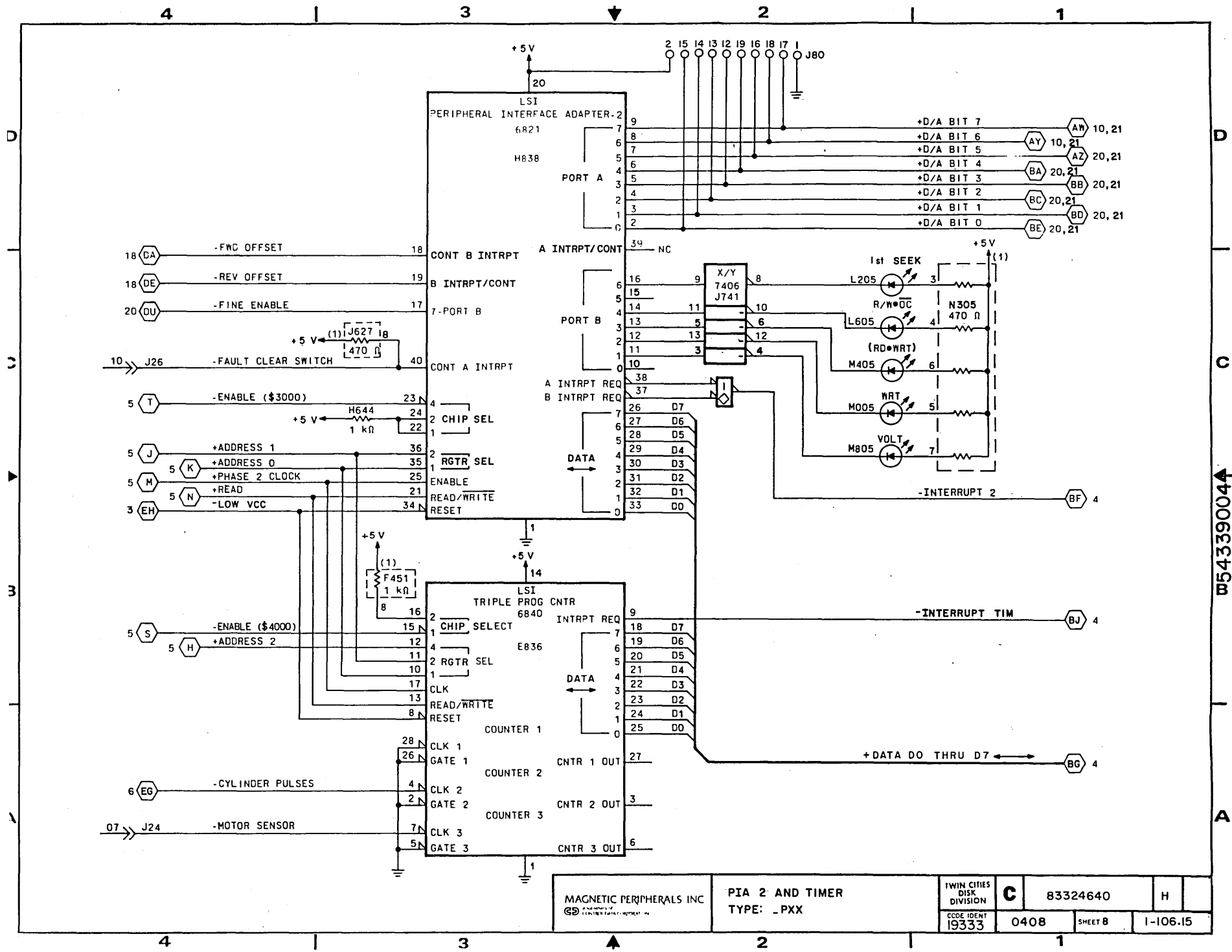
0102 P26-10 10 --> J26
0602 P24-07 07 --> J24



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0408	PAGE	1-106.14

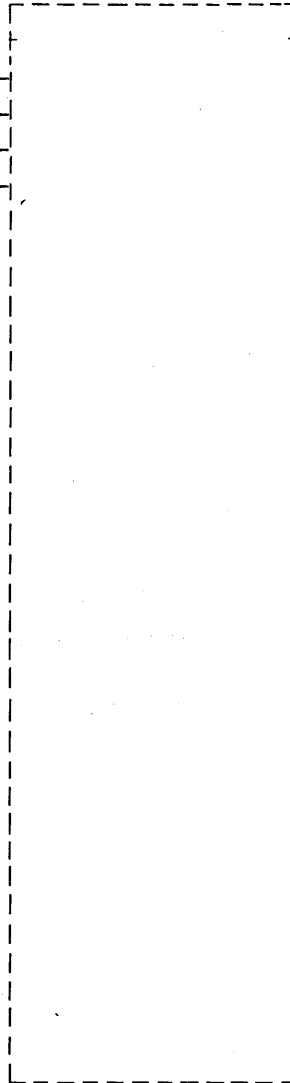


MAGNETIC PERIPHERALS INC A Division of General Electric Company	PIA 2 AND TIMER TYPE: -PXX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0408	SHEET 8	1-106.15		

B543390044

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0603	P24-03	0603	P24-03	03	J24
0602	P24-01	0602	P24-01	01	J24
0206	J20-12	0212	J20-29	26	J14
0102	P26-14	0102	P26-14	14	J26



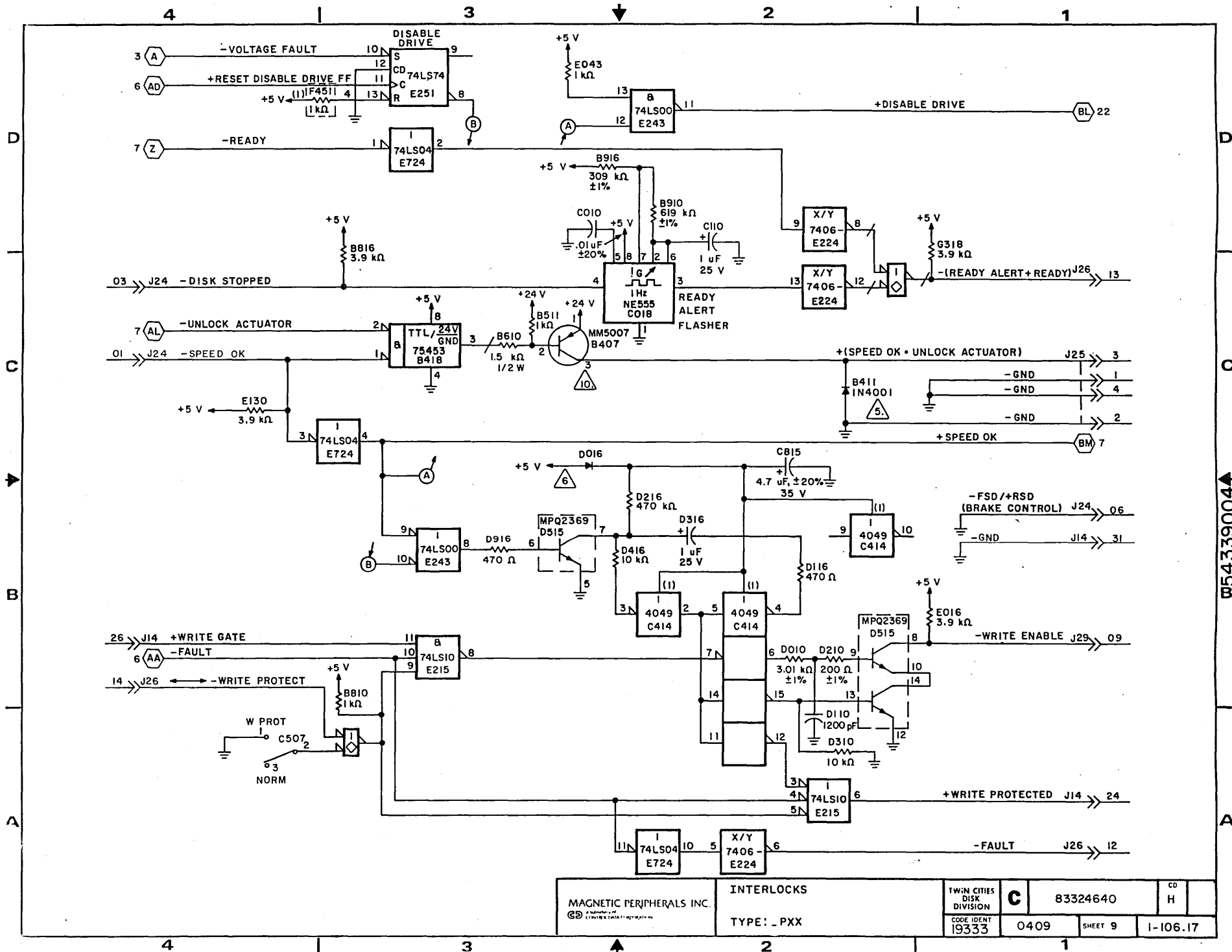
SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS	
J26	>> 13	0102	P26-13
J25	>> 03	1042	P25-03
J25	>> 01	NC	-
J25	>> 04	NC	-
J25	>> 02	1042	P25-02
J24	>> 06	0602	P24-06
J14	>> 31	0206	J20-22
J29	>> 09	0802*	J30-18
J14	>> 24	0754*	J30-18
J26	>> 12	0207+	J20-08
		0102	P26-12

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)
 +0204 on B/C/E/FEBN boards.

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0409	PAGE	1-106.16

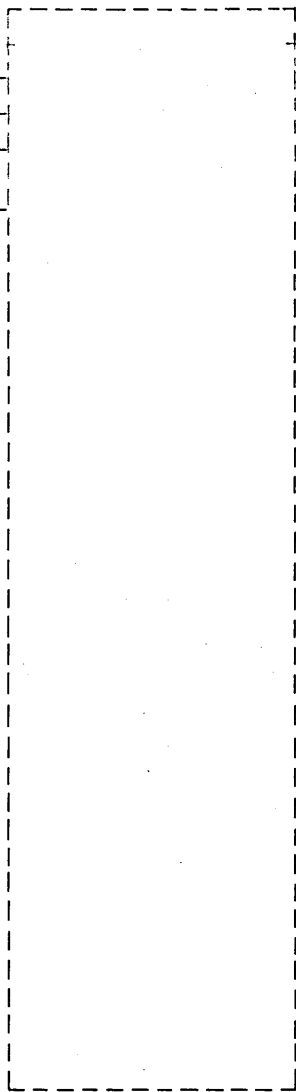


W54-339004A

MAGNETIC PERIPHERALS INC. <small>© 1975</small>	INTERLOCKS	TWIN CITIES DISK DIVISION	C	83324640	CD
	TYPE: -PXX	CODE IDENT 19333	0409	SHEET 9	I-106.17

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0206	J20-03	0212	J20-38	19	J14
0206	J20-06	0212	J20-35	23	J14
0703*	J31-13	0703*	J31-13	14	J29
0753*	J30-13	0753*	J30-13		
0703*	J31-14	0703*	J31-14	13	J29
0753*	J30-14	0753*	J30-14		



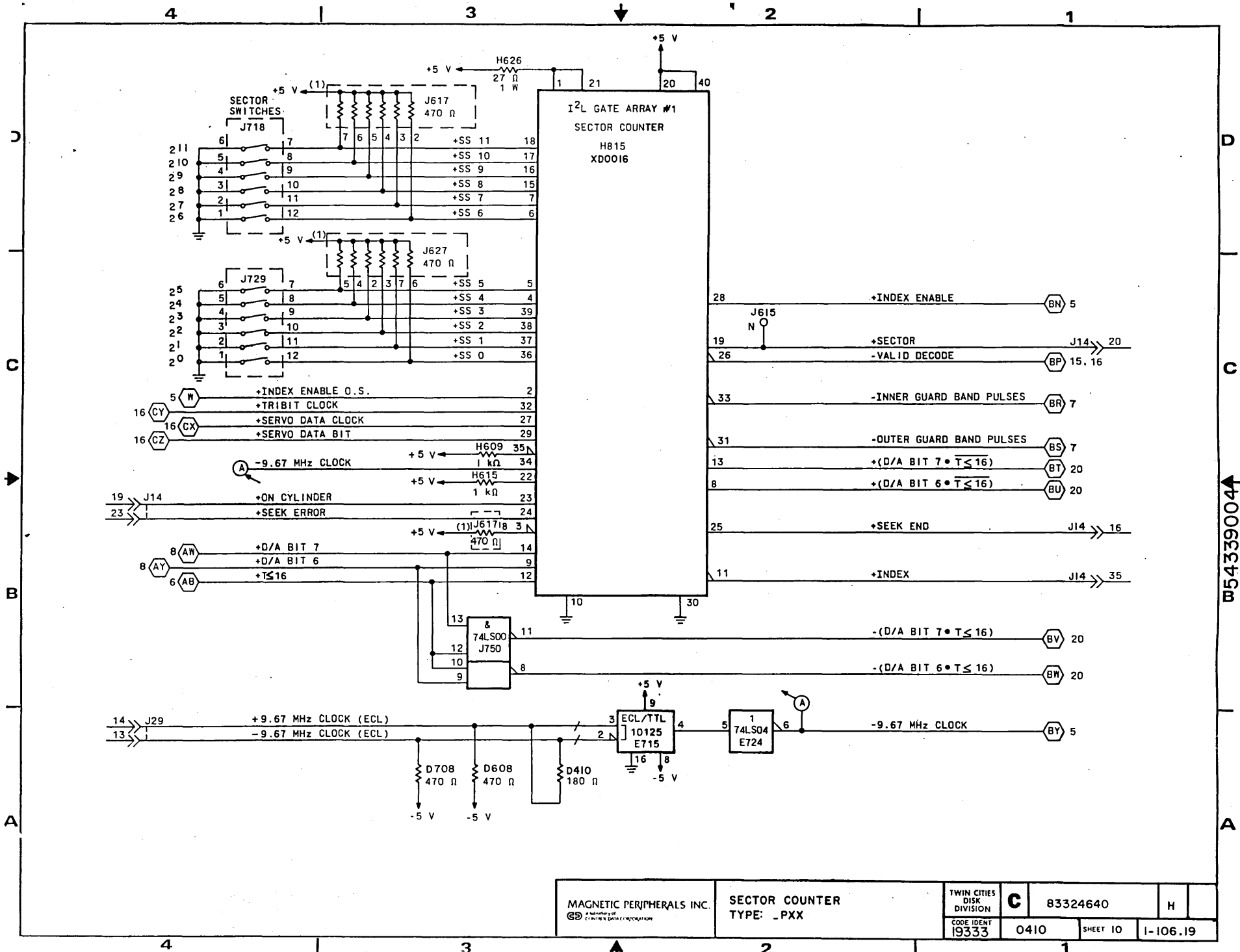
SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS	
0204	J20-01	0204	J20-40
0205	J20-09	0210	J20-32
0204	J20-30	0204	J20-11

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0410	PAGE	1-106,18

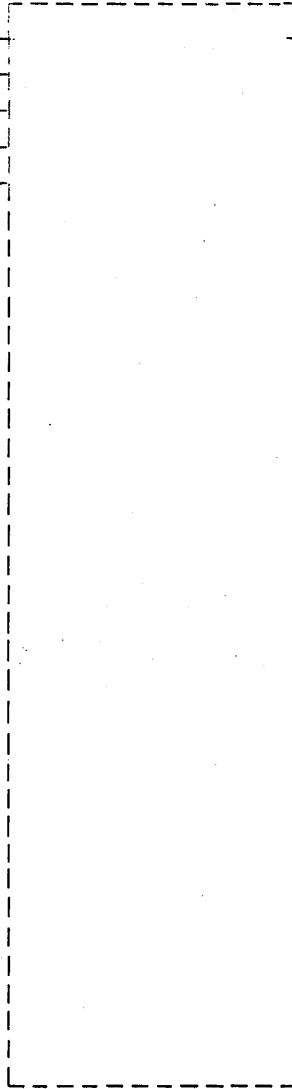


MAGNETIC PERIPHERALS INC. a subsidiary of GE DATA CORPORATION	SECTOR COUNTER TYPE: PXX	TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0410	SHEET 10	I-106.19	

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SIGNAL INPUTS

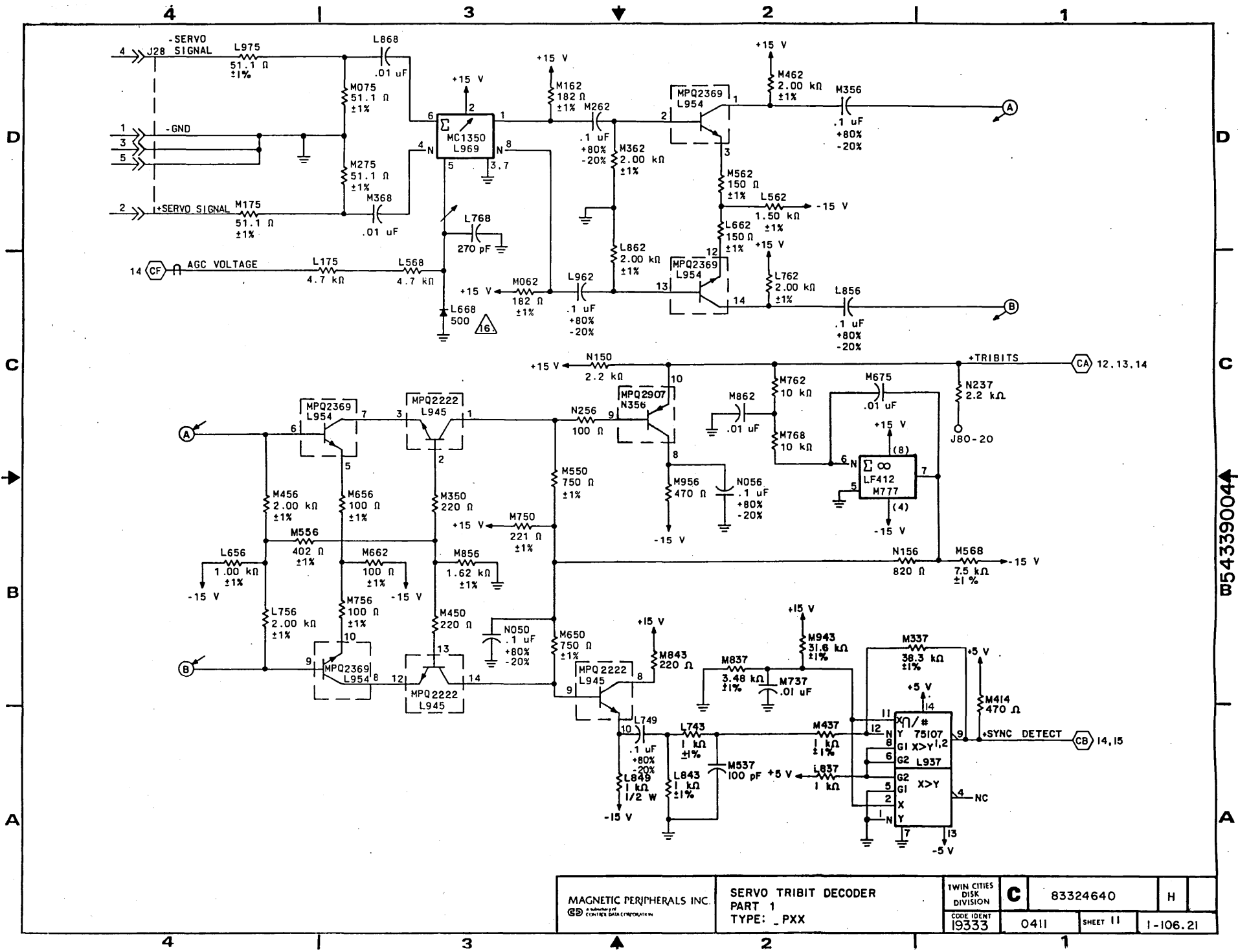
0302 P28-04 04 ->> J28
0301 P28-01 01 ->> J28
NC - 03 ->> J28
0301 P28-05 05 ->> J28
0302 P28-02 02 ->> J28



SIGNAL OUTPUTS

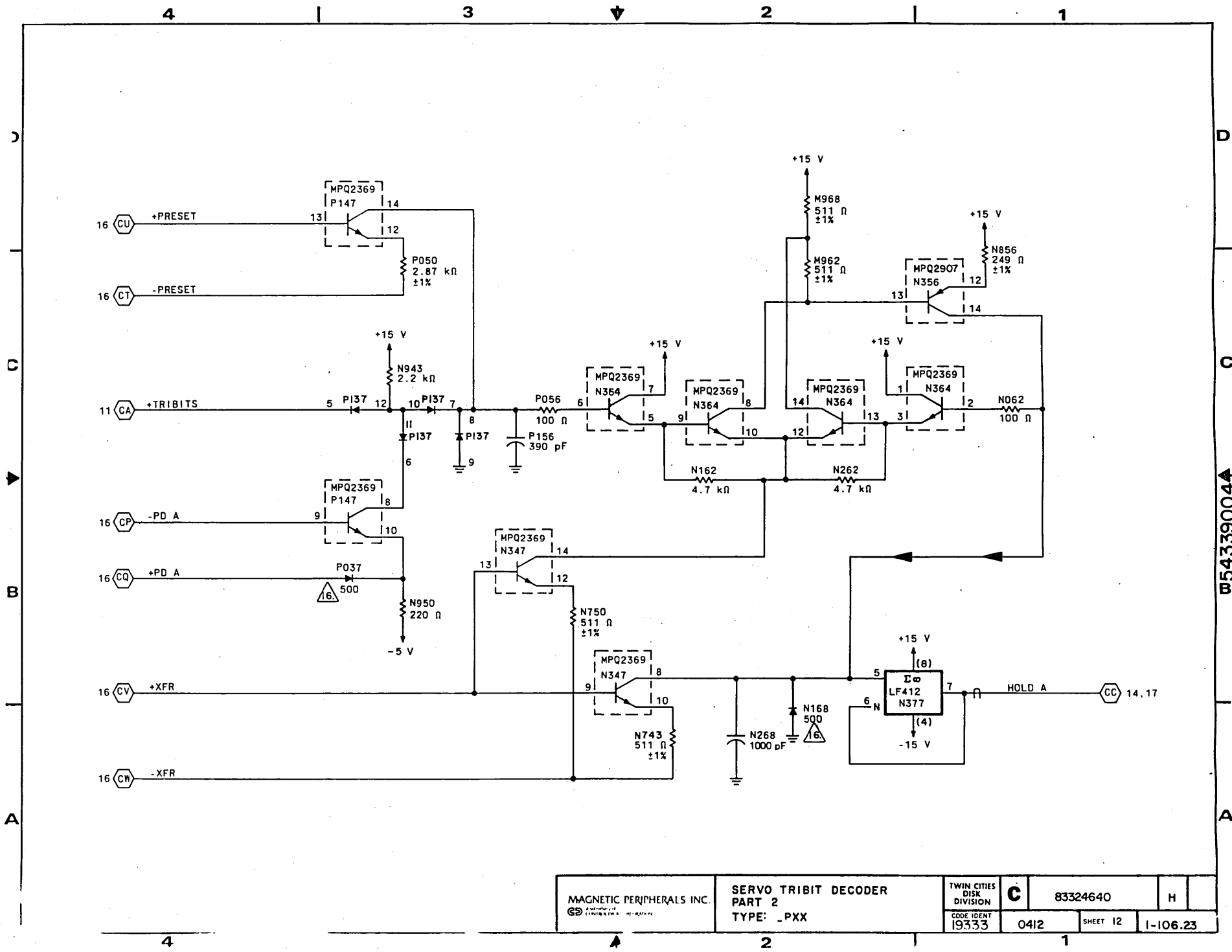
LOGIC CROSS REFERENCE INFORMATION

PUB		83324640		REV		H	
CROSS REF NO		0411		PAGE		1-106.20	



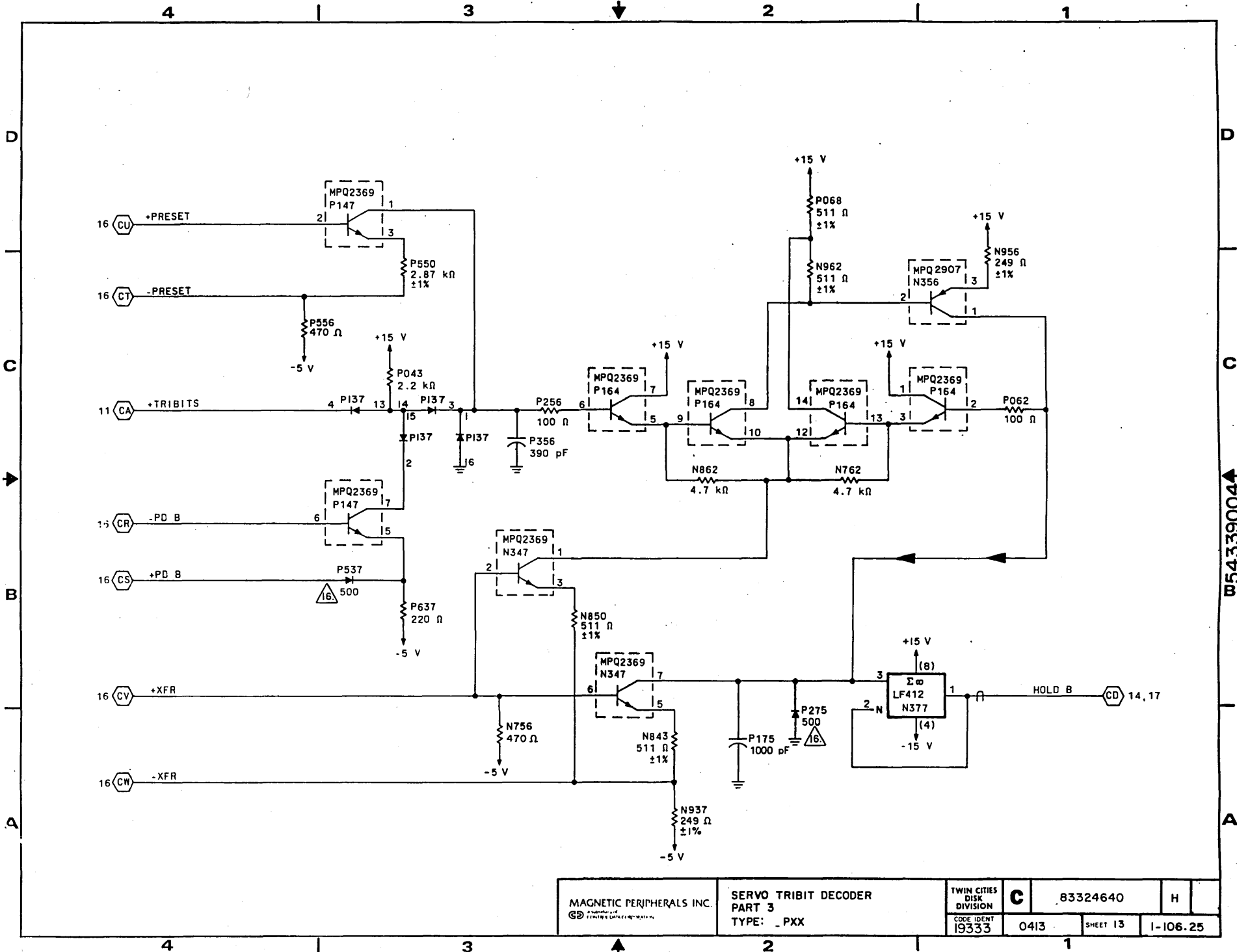
MAGNETIC PERIPHERALS INC. A DIVISION OF GE CORP. DATA CORPORATION	SERVO TRIBIT DECODER PART 1 TYPE: PXX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT I9333	0411	SHEET 11			

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MAGNETIC PERIPHERALS INC. <small>GE</small>	SERVO TRIBIT DECODER PART 2 TYPE: _PXX	TWIN CITIES DISK DIVISION	C	83324640	H
		CODE IDENT 19333			

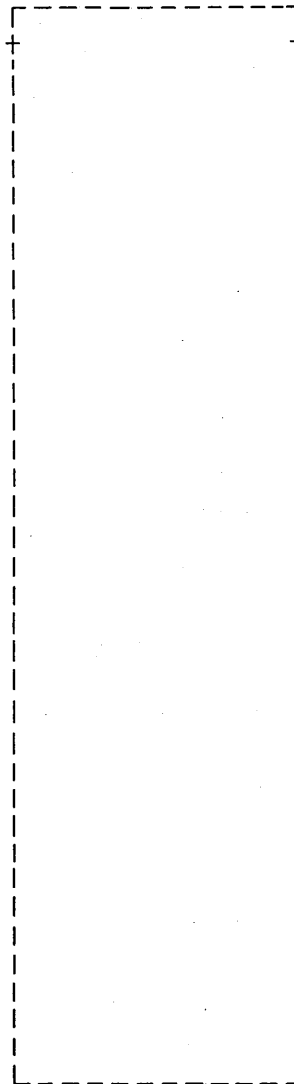


W54339004

MAGNETIC PERIPHERALS INC. SERVO TRIBIT DECODER PART 3 TYPE: PXX	TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0413	SHEET 13	I-106.25

SIGNAL INPUTS

SIGNAL OUTPUTS



J29 >> 17

0703* J31-10
0753* J30-10
0801* J30-10

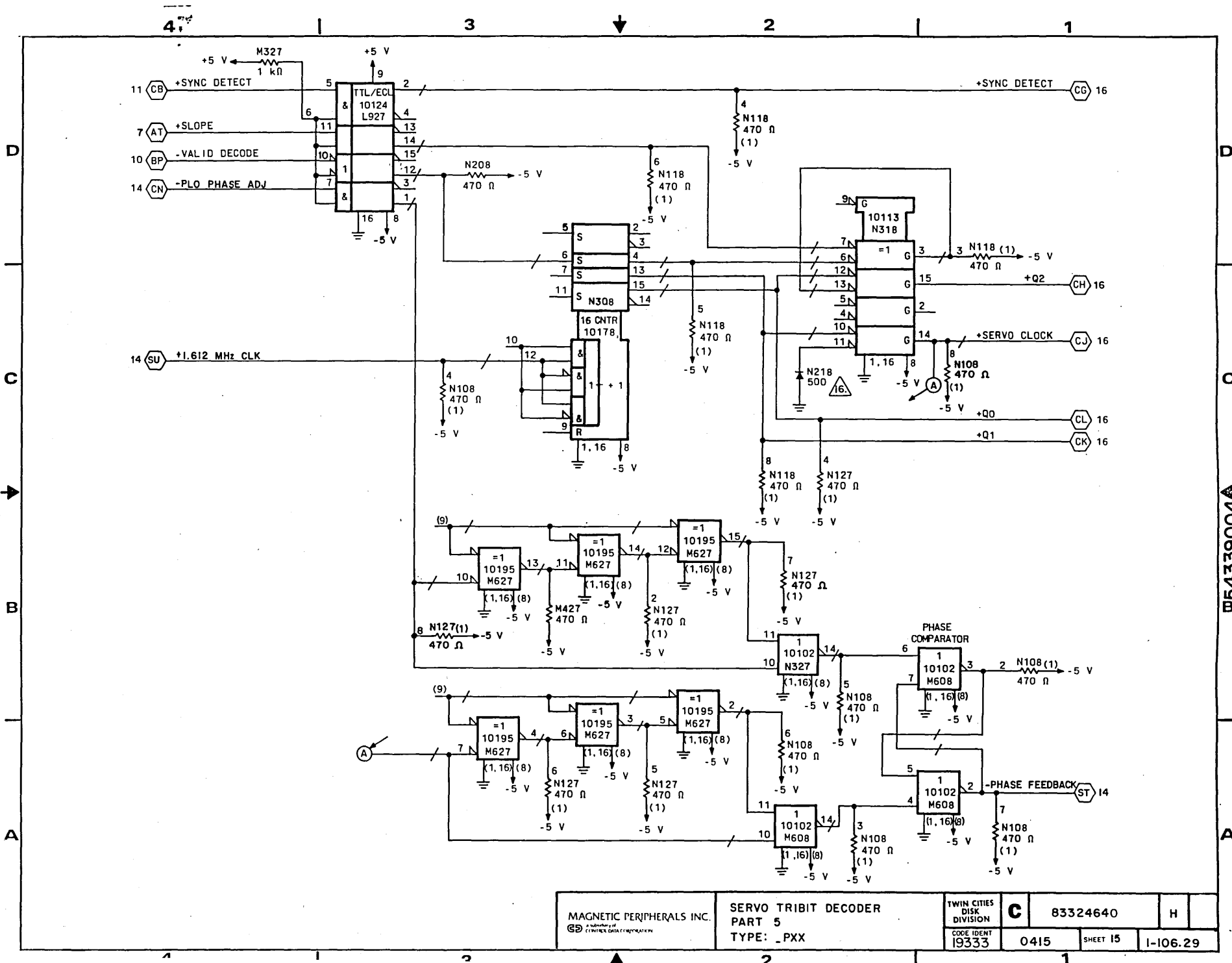
J29 >> 16

0703* J31-11
0753* J30-11
0801* J30-11

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

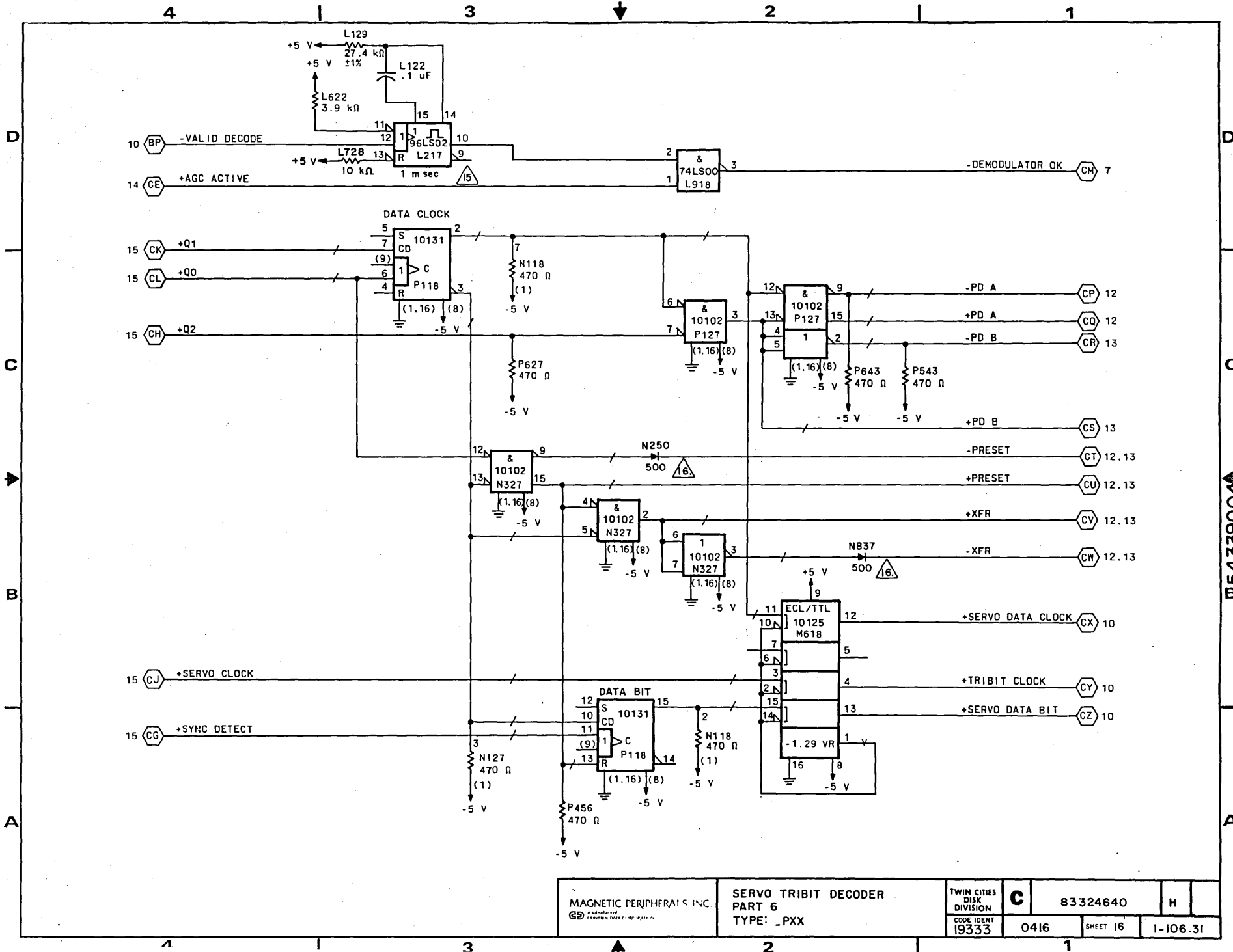
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0414	PAGE	1-106.26



W543390044

MAGNETIC PERIPHERALS INC. <small>a member of</small> <small>GE COMMERCIAL DATA CORPORATION</small>	SERVO TRIBIT DECODER PART 5 TYPE: -PXX		TWIN CITIES DISK DIVISION	C	83324640	H
			CODE IDENT I9333	0415	SHEET 15	I-106.29



MAGNETIC PERIPHERALS INC. A DIVISION OF GENERAL ELECTRIC COMPANY	SERVO TRIBIT DECODER PART 6 TYPE: -PXX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0416	SHEET 16	1-106.31		

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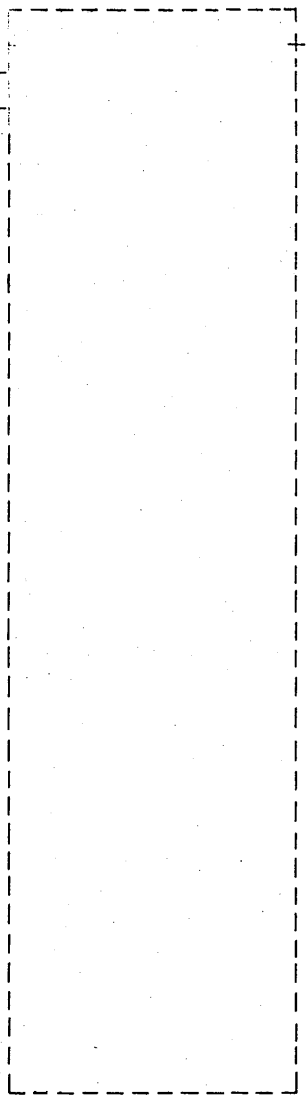
SIGNAL INPUTS

SIGNAL OUTPUTS

<u>SINGLE</u>		<u>DUAL</u>	
<u>CHANNEL</u>	<u>UNITS</u>	<u>CHANNEL</u>	<u>UNITS</u>

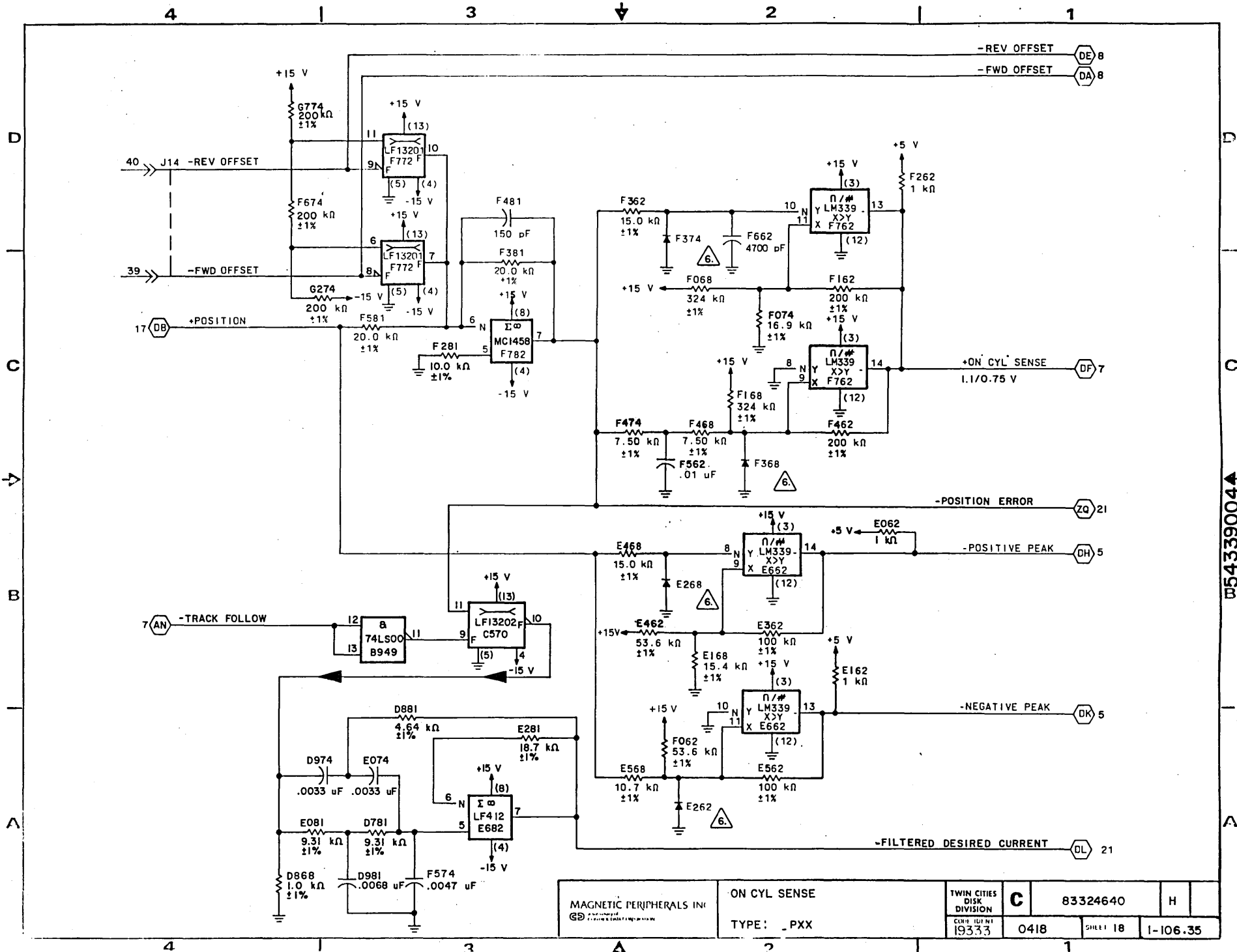
0206	J20-40	0212	J20-01	40	>>	J14
------	--------	------	--------	----	----	-----

0206	J20-38	0212	J20-03	39	>>	J14
------	--------	------	--------	----	----	-----



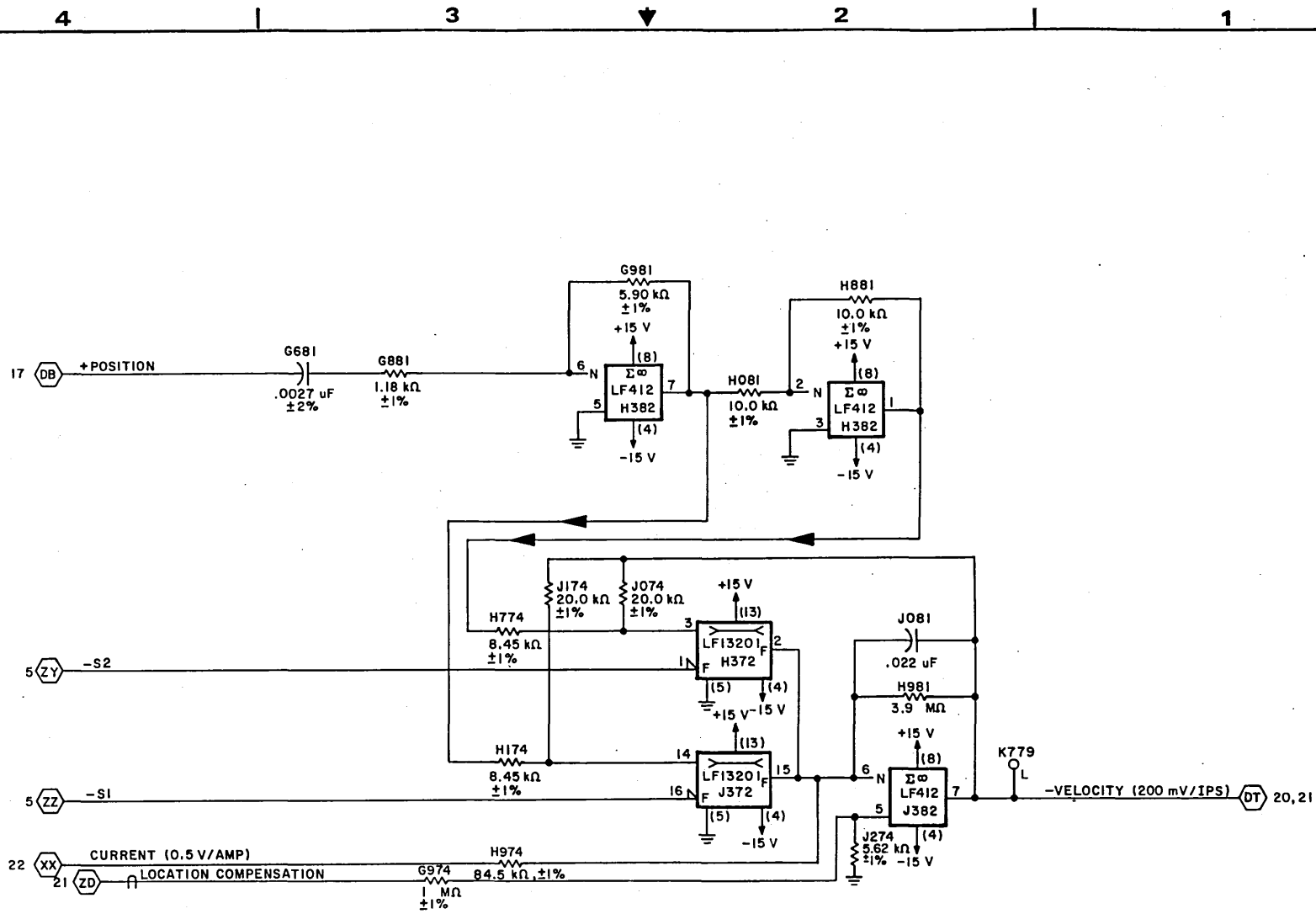
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0418	PAGE	1-106.34



MAGNETIC PERIPHERALS INC. GD	ON CYL SENSE	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE: PXX	DATE: 10/1/71 193.33	0418	SHEET 18	1-106.35

W54339004



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C

W543390044

A

MAGNETIC PERIPHERALS INC. 	VELOCITY TYPE: PXX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT I9333	0419	SHEET 19	I-106.37		

4

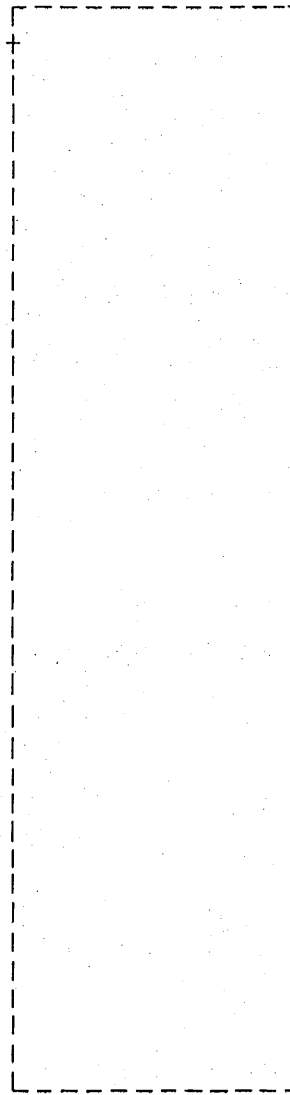
3

2

1

SIGNAL INPUTS

SIGNAL OUTPUTS



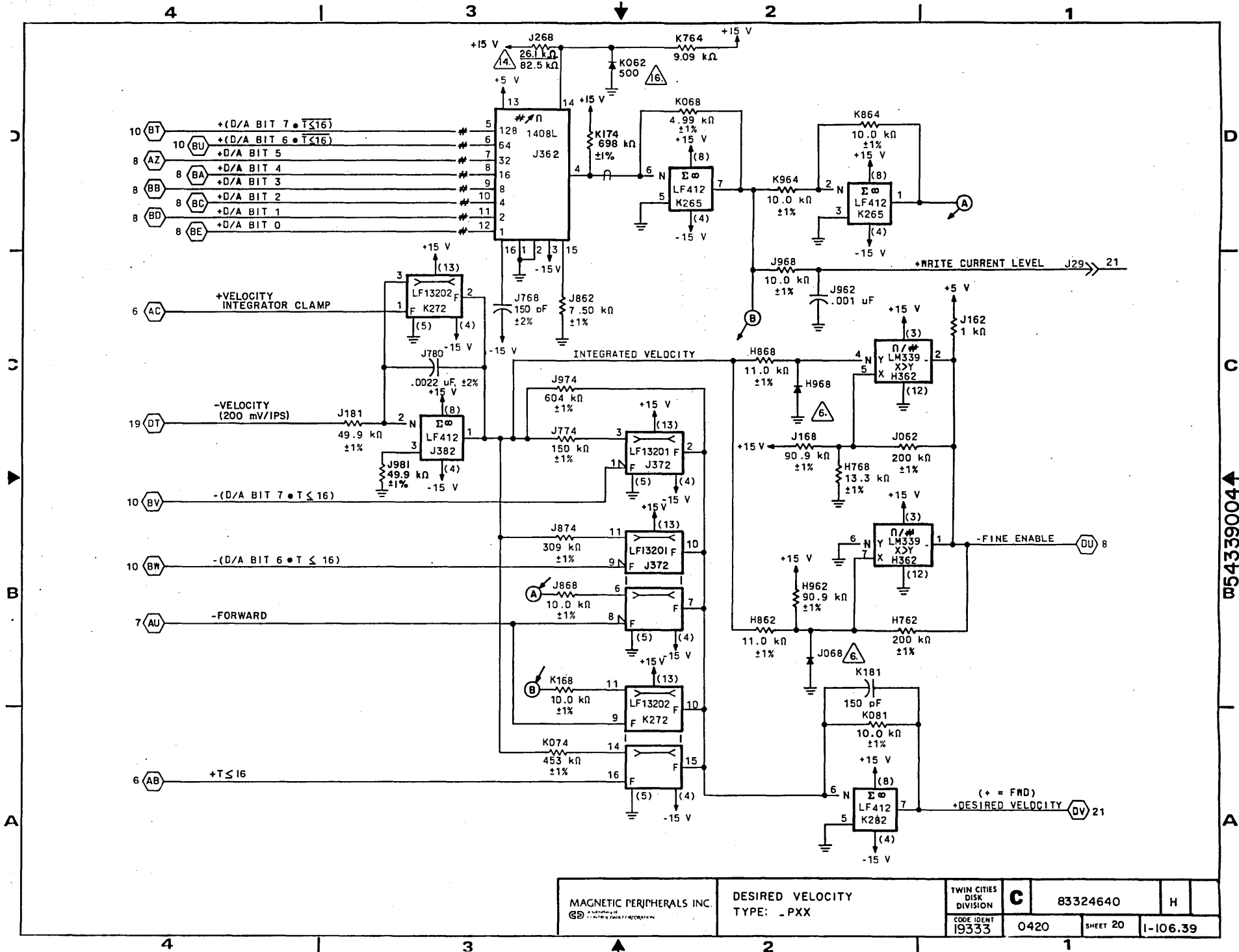
J29 >> 21

- 0701* J31-06
- 0803* J30-06
- 0756* J30-06

*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0420	PAGE	1-106.38

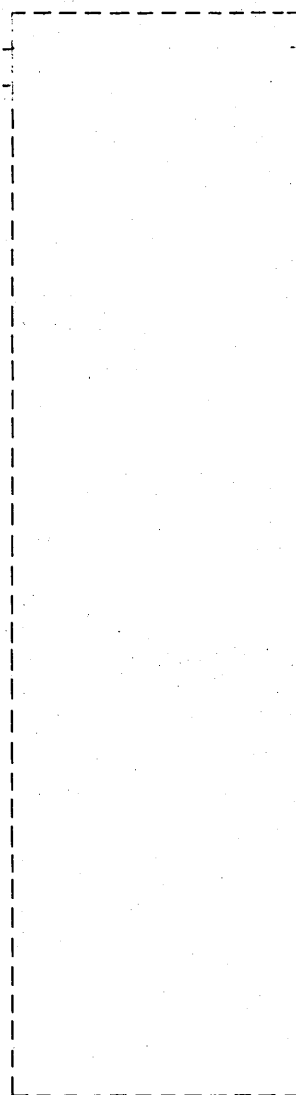


MAGNETIC PERIPHERALS INC. A DIVISION OF GTE Sylvania Corporation	DESIRED VELOCITY TYPE: PXX	TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0420	SHEET 20	1-106.39	

W54339004

SIGNAL INPUTS

0502 P23-07 07 >> J23
0502 P23-05 05 >> J23

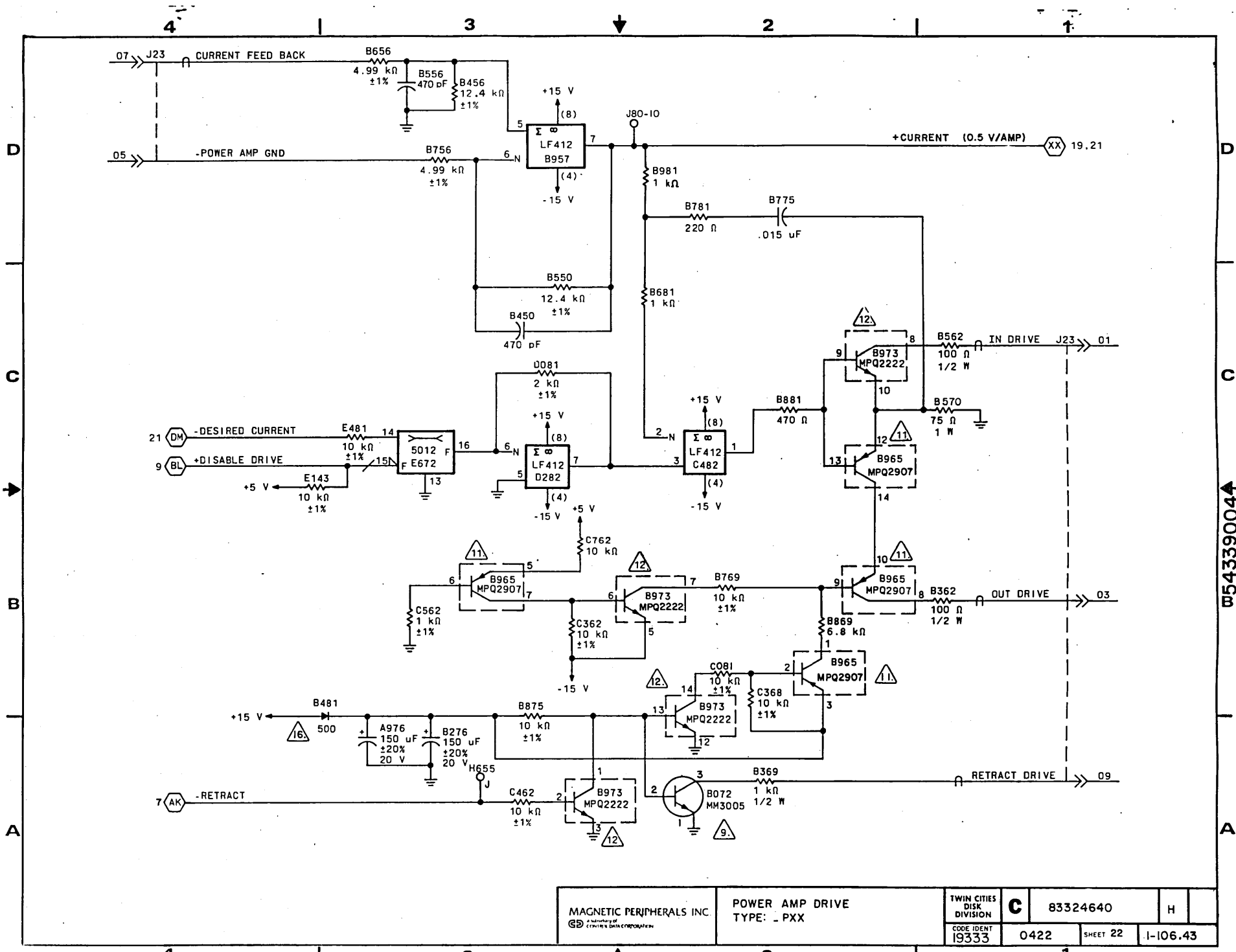


SIGNAL OUTPUTS

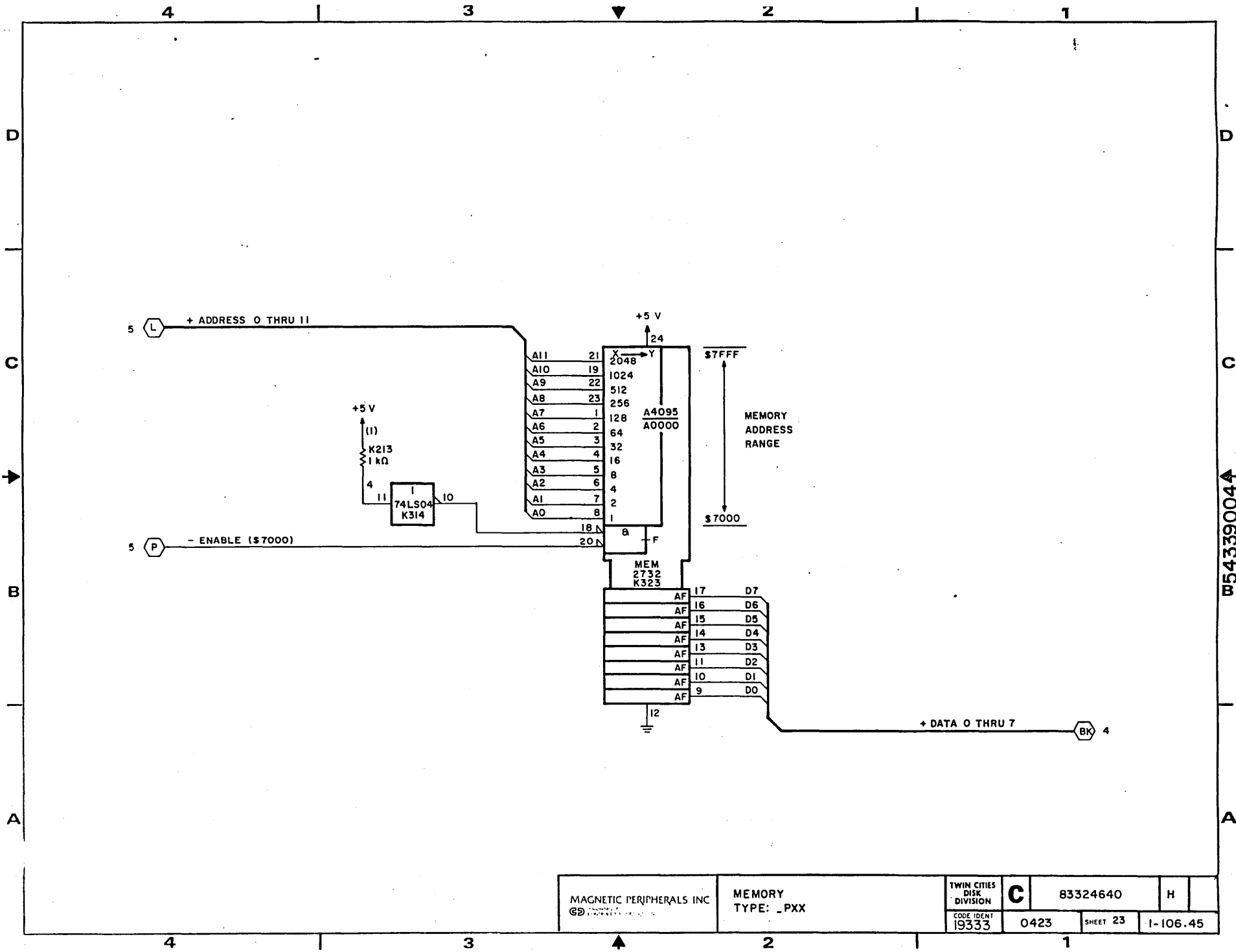
J23 >> 01 0502 P23-01
J23 >> 03 0502 P23-03
J23 >> 09 0502 P23-09

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0422	PAGE	1-106.42



MAGNETIC PERIPHERALS INC. <small>A subsidiary of CONRAD ELECTRON CORPORATION</small>	POWER AMP DRIVE TYPE: PXX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT I9333	0422	SHEET 22	I-106.43		

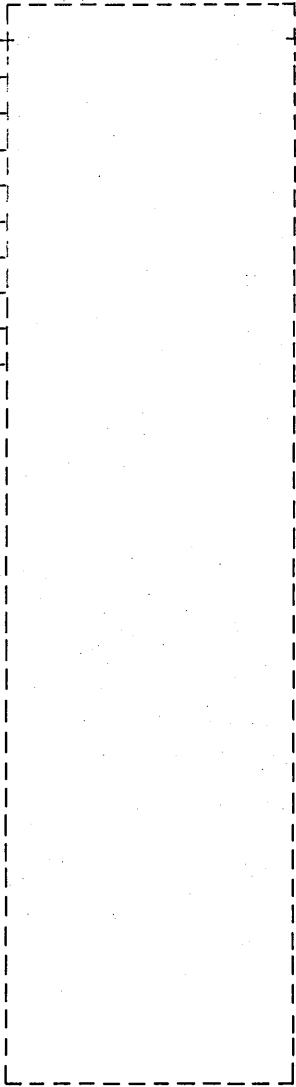


W54339004A

MAGNETIC PERIPHERALS INC GD	MEMORY TYPE: PXX	TWIN CITIES DISK DIVISION	C	83324640	H
		CODE IDENT 19333			

SIGNAL INPUTS

1002	P15-07	06	>>	J22
1002	P15-13	01	>>	J22
1002	P15-14	03	>>	J22
0601	J37-01	04	>>	J22
NC	-	05	>>	J22
1002	P15-15	02	>>	J22
0402	J23-02	02	>>	P23
NC	-	11	>>	P23
NC	-	12	>>	P23
NC	-	13	>>	P23



SIGNAL OUTPUTS

LOGIC CROSS REFERENCE INFORMATION

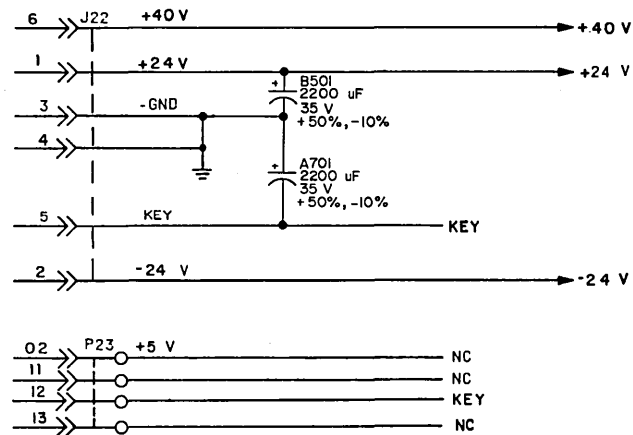
PUB		REV	
83324640		H	
CROSS REF NO	0501	PAGE	1-106.46

PART NO. RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRAFT	DATE	CHKD	APP
00 THRU 99	01	DT05008	PRE-RELEASED		5/11/82	JG	II
	02	DT05041	ADD KEYING	DLM	6/8/82	DGD	II
	03	DT05053	CHG TRANSISTOR	DLM	6/28/82	DGD	II
	A	DT23000 DT05010	RELEASED	DLM	1/16/82	DGD	II
	B	DT05095	SHT 1, PIN 5, CHG NC-KEY	DLM	1-16-82	DGD	II
	C	DT05106	ADD KEY TO J23	DLM	9-24-82	DGD	II
	D	DT05078	CORRECT REV. SEA.	DLM	9-24-82	DGD	II
	E	DJ03132	CORRECTIONS	DLM	10-18-82	DGD	II
	F	DJ05079C	ADD NOTES 4 & 5	DLM	10-22-82	DGD	II
	G	DT05171	BQHX TO CQH X	MJ	3-8-83		
	H	DJ05647	ADD CAPACITORS	JG	6-25-84		
	J	DJ05740	MOVE CAPACITORS	JG	6-25-84		
	K	DJ05820	CORRECTIONS	JG	6-25-84		
	L	DJ05874	CORRECTION	JG	11-28-84		

NOTES:

1. UNLESS OTHERWISE SPECIFIED:
 ALL TRANSISTORS, SNPN, 2N3716 50221301.
 ALL DIODES, SILICON 95588200.

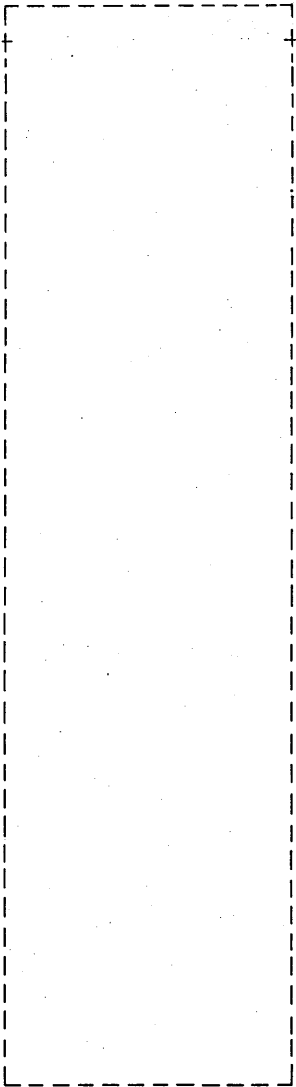
2. TRANSISTOR, SPNP, 2N3792, 50221401.
 3. TRANSISTOR, SPNP, GE45E3 15165658.
 4. MAY BE 39 Ω AND 27 Ω RESISTOR IN PARALLEL.
 5. MAY BE 68 Ω AND 120 Ω RESISTOR IN PARALLEL.



REFERENCE DRAWING			MAGNETIC PERIPHERALS INC.			TITLE		
COMP ASSY. 54342901			A DIVISION OF CENTRE DATA CORPORATION			SCHEMATIC DIAGRAM		
CTR 54343101			FIRST USED ON	NEXT ASSEMBLY		POWER AMP		
			PA5A1-A			TYPE BQHX/CQH X		
COMPONENTS, EXCEPT AS NOTED			DWN	JACQUE STREGE	1-15-82			
RES	±5%	OHMS	1/4 W	CHKD	DG-Dout	4-3-82	SMALL DISK DIVISION	C
CAP				ENGR	R. G. Melser	4-30-82		83324640
				MFG	K. M. Carter	4-16-82		F
				QA	M. J. Carter	9-22-82	FSCM NO. 19333	CROSS REF NO 0501
						SHEET 1 OF 3		
						PAGE 1-107		

SIGNAL INPUTS

0422 J23-09 09 >> P23
 0422 J23-01 01 >> P23
 0422 J23-03 03 >> P23
 0402 J23-04 04 >> P23
 0402 J23-06 06 >> P23
 0402 J23-08 08 >> P23
 0402 J23-10 10 >> P23
 0402 J23-12 12 >> P23

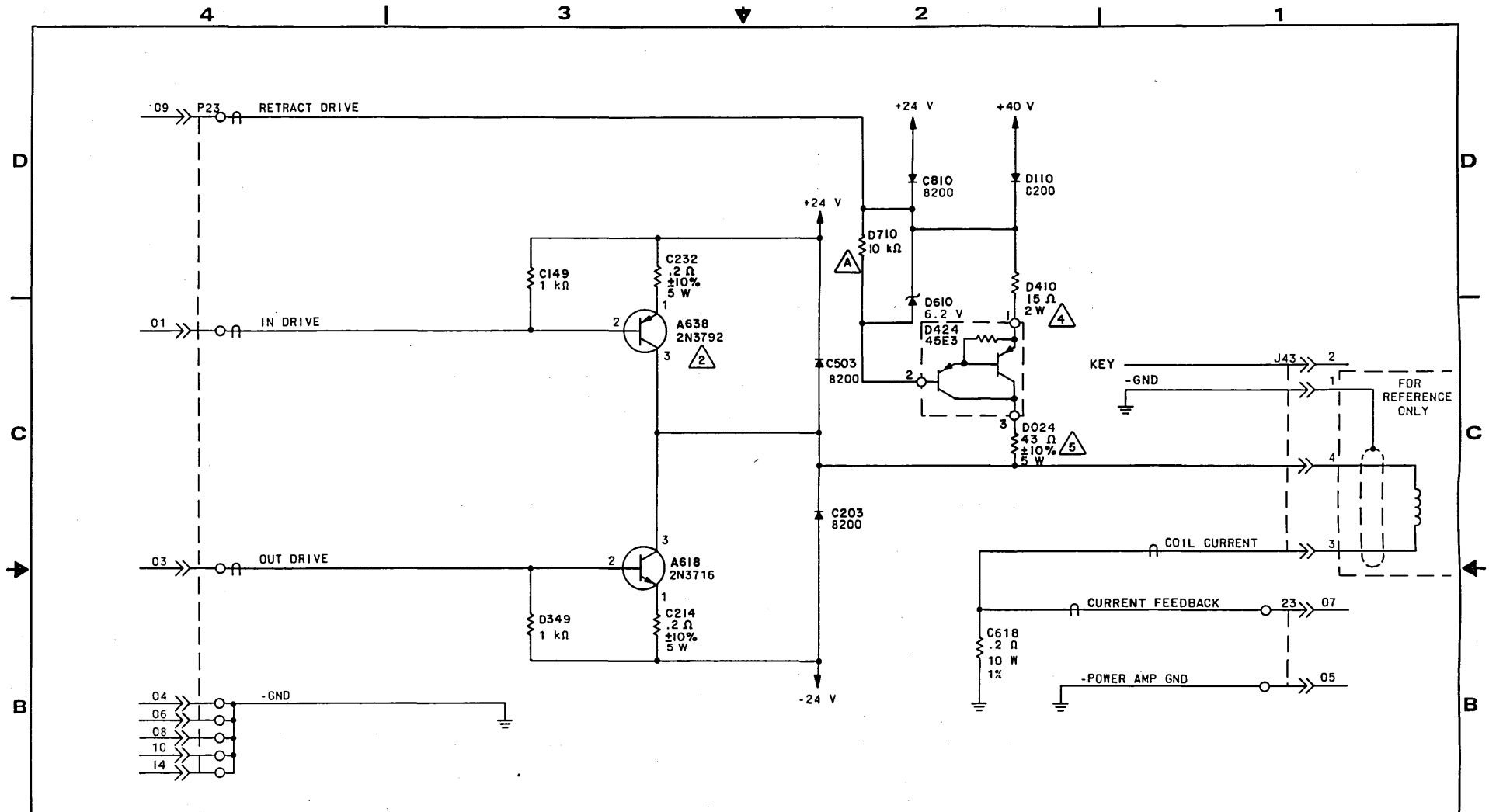


SIGNAL OUTPUTS

J43 >> 02 To Voice Coil
 J43 >> 01 To Voice Coil
 J43 >> 04 To Voice Coil
 J43 >> 03 To Voice Coil
 P23 >> 07 0422 J23-07
 P23 >> 05 0422 J23-05

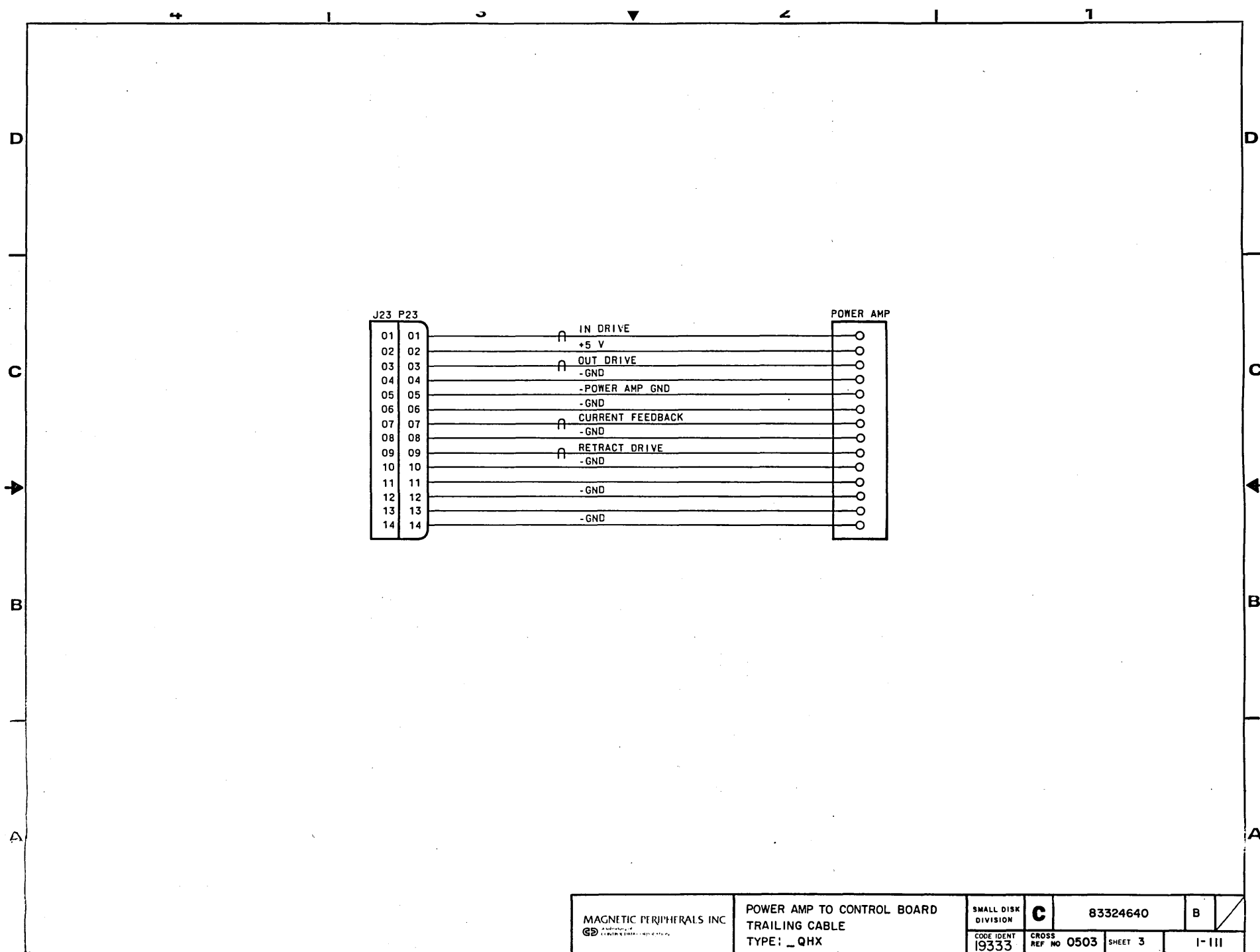
LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV B
CROSS REF NO 0502	PAGE 1-108	



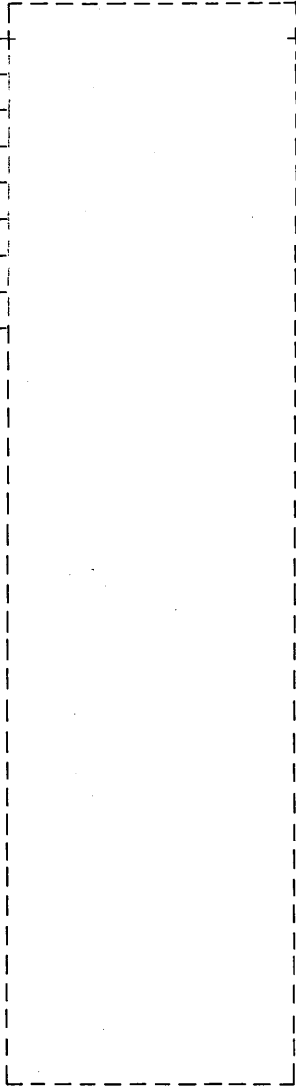
NOTES:
 ⚠️ RESISTOR D710 NOT ON BQHX CARD.

MAGNETIC PERIPHERALS INC. <small>AN IRVING-CLOUD COMPANY</small>	POWER AMP TYPE: - QHX	SMALL DISK DIVISION	C	83324640	F
		CODE IDENT 19333	CROSS REF NO 0502	SHEET 2	1-109



SIGNAL INPUTS

0402	J24-02	02	>>	P24
0402	J24-04	04	>>	P24
0402	J24-08	08	>>	P24
0402	J24-10	10	>>	P24
0402	J24-12	12	>>	P24
0402	J24-14	14	>>	P24
1002	P15-07	06	>>	J37
1002	P15-08	05	>>	J37
1002	P15-13	04	>>	J37



SIGNAL OUTPUTS

J39	>>	07	To Motor
J39	>>	03	To Motor
J39	>>	06	To Motor
J37	>>	01	0501 J22-04

LOGIC CROSS REFERENCE INFORMATION

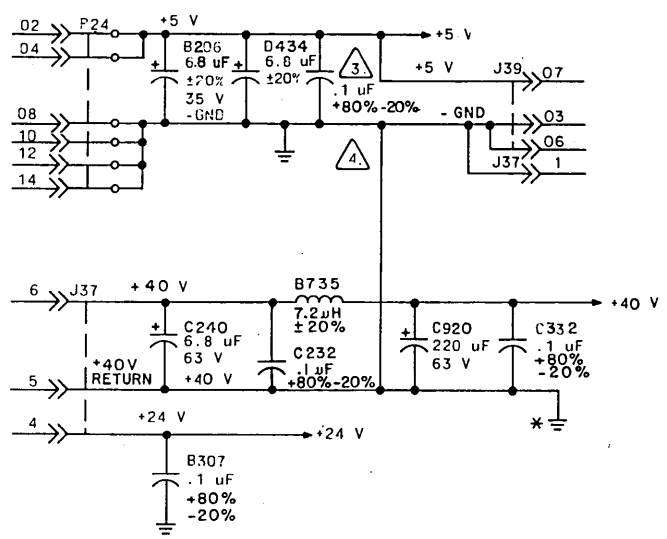
PUB	83324640	REV	H
CROSS REF NO	0601	PAGE	1-112

UNUSED LOGIC ELEMENTS 2

ELEMENT	LOCATION	OUTPUT PIN (S)
7404	E803	12
7404	E803	4
7404	E803	1

FILTER CAPS 3

VALUE
+5 V
.1 uF
E120
D640
D504
D104
E104
E127
C611
F403



PART NO RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DFT	DATE	CHKD	APP
00 THRU 99	01	D10313B	PRE-RELEASED		6/1/82	SJA	II
	02	D10307Z	CHG LSI PROGRAM	DLM	7/25/82	OGD	II
	A	D103000 D103043D	RELEASED	DLM	7/2/82	YS	II
	B	DJ0313Z	ADD PIN TO SHT REF	DLM	10-15-82	Y-D	II
	C	DJ03389	CORRECTION	MJ	7-12-83		
	D	DJ03655	NEW BOARD BLANK	JG	11-28-84		
E	DJ03675	CHG RESISTOR VALUE	JG	11-28-84			
F	DJ03865	CORRECTIONS	CB	5-2-86			

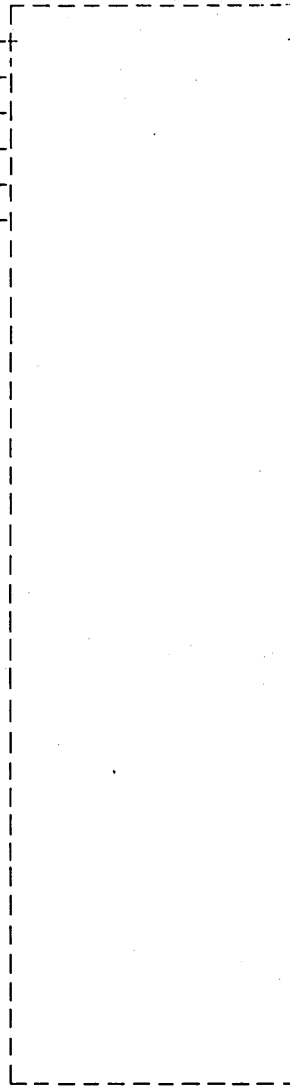
NOTES:

- UNLESS OTHERWISE SPECIFIED:
ALL 16 PIN IC'S HAVE PIN 8 CONNECTED TO GND AND PIN 16 CONNECTED TO +5 V.
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GND AND PIN 14 CONNECTED TO +5 V.
ALL DIODES 95588200.
ALL RESISTOR PACK RESISTORS $\pm 3\%$ 1/8 W.
2 UNUSED LOGIC ELEMENT INPUT PINS ARE GROUNDED.
- 3 SEE TABLE FOR FILTER CAP LOCATIONS.
- 4 +40 V RETURN AND GND TIED TOGETHER AT ONLY ONE POINT. +40 V RETURN IS INDICATED BY $\frac{*}{\perp}$.
- 5 -GND ON FSD ONLY.

REFERENCE DRAWING		MAGNETIC PERIPHERALS INC.		TITLE	
COMP ASSY 54334902		GSD		SCHEMATIC DIAGRAM	
CTR 54335102		FIRST USED ON PA3A1-A PA5A1 A		MOTOR SPEED CONTROL	
		NEXT ASSEMBLY		TYPE CPMX	
COMPONENTS EXCEPT AS NOTED		DWN	F.A.	12/22/81	
TOLERANCE	VALUE	RATING	CHKD	CMS/DGB	5/27/82
RES $\pm 5\%$	OHMS	1/4 W	ENGR	R. Nelson	6-1-82
CAP $\pm 10\%$			MFG		
			QA		
		FSCM. NO. 19333		CROSS REF NO 0601	SHEET 1 of 5
		REF: 54335002		PAGE 1-113	

SIGNAL INPUTS

0404 J24-05 05 ->> P24
 0407 J24-11 11 ->> P24
 0409 J24-06 06 ->> P24
 1032 P39-04 04 ->> J39
 1032 P39-01 01 ->> J39
 1032 P39-05 05 ->> J39

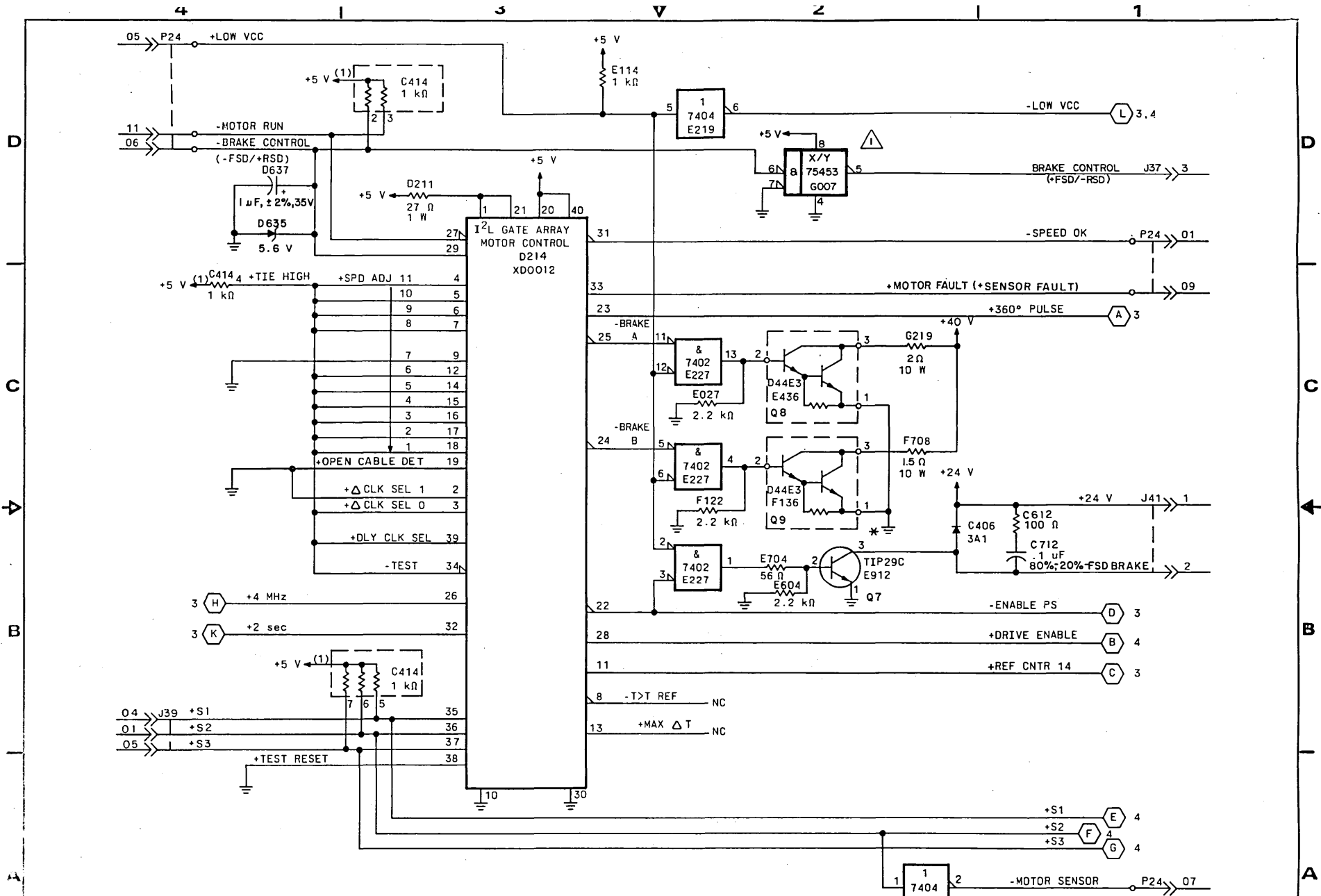


SIGNAL OUTPUTS

J37 ->> 03 1002 P15-12
 P24 ->> 01 0409 J24-01
 P24 ->> 09 0407 J24-09
 J41 ->> 01 To Brake
 J41 ->> 02 To Brake
 P24 ->> 07 0408 J24-07

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0602	PAGE	1-114

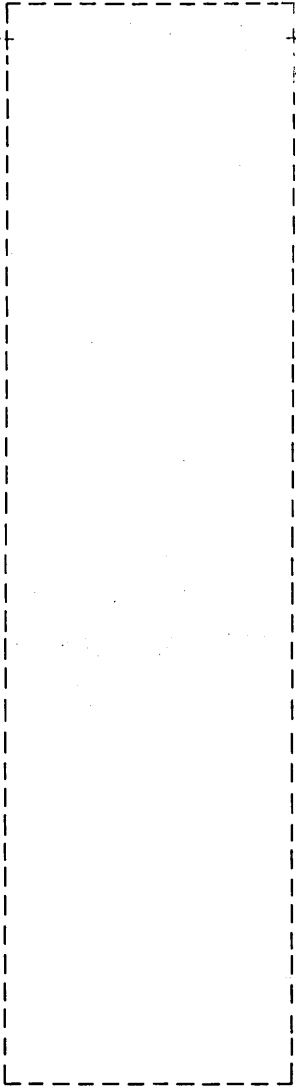


NOTES:
 ⚠ CHIP IN LOCATION G007 IS NOT ON EARLY CPMX BOARDS.

MAGNETIC PERIPHERALS INC. <small>PHILADELPHIA, PA.</small>	MOTOR SPEED CONTROL	SMALL DISK DIVISION	C	83324640	F
	TYPE: <u> </u> PMX	CODE IDENT 19333	CROSS REF NO 0602	SHEET 2	I-115

SIGNAL INPUTS

0402 J24-13 13 -> -> P24



SIGNAL OUTPUTS

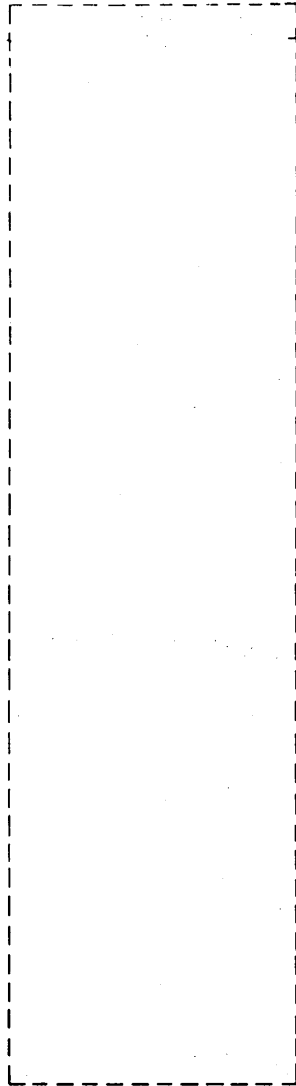
J37 -> -> 02 1002 P15-09
P24 -> -> 03 0409 J24-03

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0603	PAGE	1-116

SIGNAL INPUTS

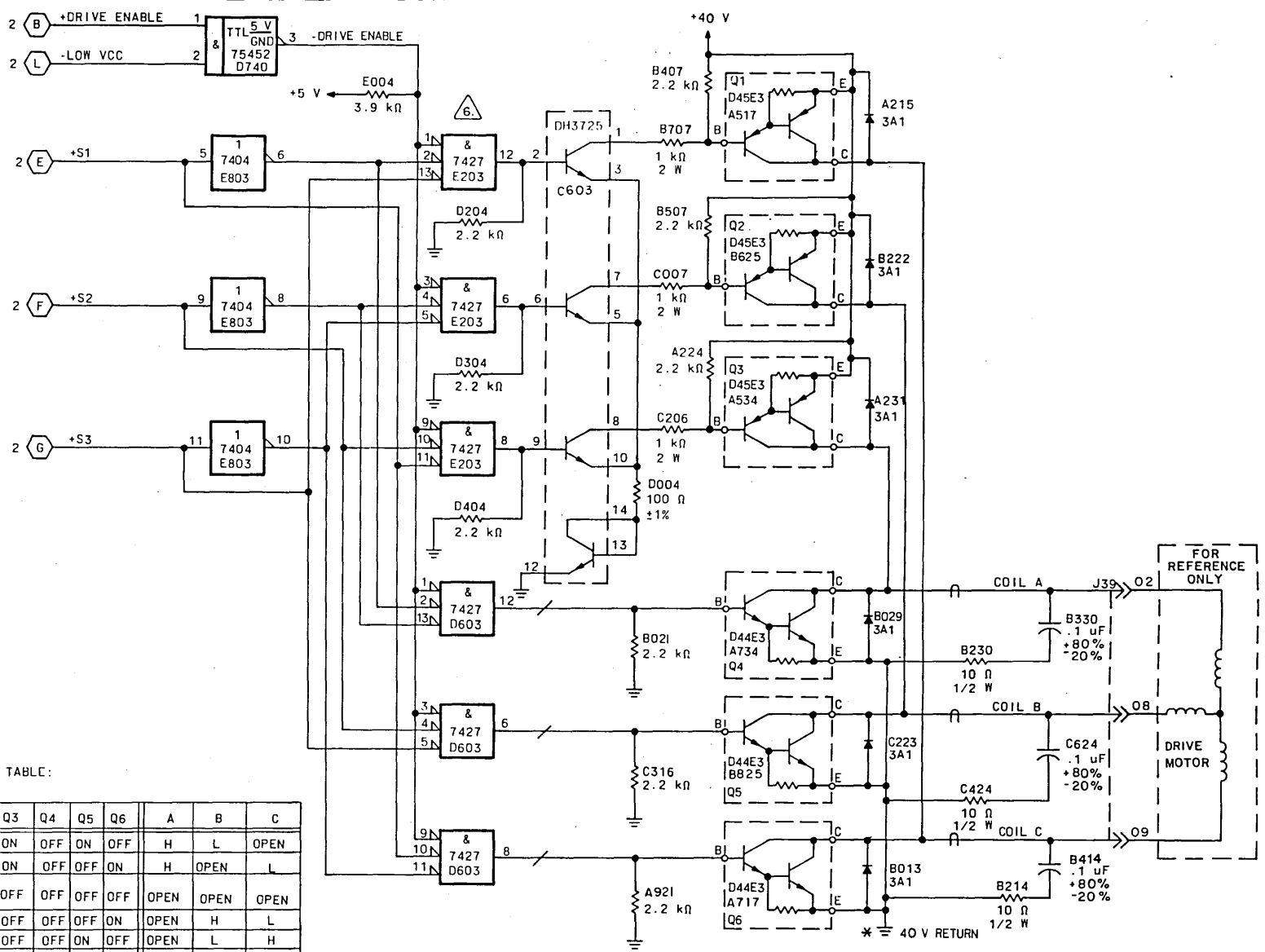
SIGNAL OUTPUTS



J39 >> 02 1032 P39-02
J39 >> 08 1032 P39-08
J39 >> 09 1032 P39-09

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0604	PAGE	1-118



6. DECODER TRUTH TABLE:

EN	S1	S2	S3	Q1	Q2	Q3	Q4	Q5	Q6	A	B	C
L	L	L	L	OFF	OFF	ON	OFF	ON	OFF	H	L	OPEN
L	L	L	H	OFF	OFF	ON	OFF	OFF	ON	H	OPEN	L
X	L	H	L	OFF	OFF	OFF	OFF	OFF	OFF	OPEN	OPEN	OPEN
L	L	H	H	OFF	ON	OFF	OFF	OFF	ON	OPEN	H	L
L	H	L	L	ON	OFF	OFF	OFF	ON	OFF	OPEN	L	H
X	H	L	H	OFF	OFF	OFF	OFF	OFF	OFF	OPEN	OPEN	OPEN
H	H	L	L	ON	OFF	OFF	ON	OFF	OFF	L	OPEN	H
H	H	H	L	OFF	ON	OFF	ON	OFF	OFF	L	H	OPEN
X	X	X	X	OFF	OFF	OFF	OFF	OFF	OFF	OPEN	OPEN	OPEN

7. THESE ARE FAULT CONDITIONS DECODED IN THE LSI CHIP. THESE CONDITIONS DO NOT OCCUR DURING NORMAL OPERATION.

D

D

C

C

A

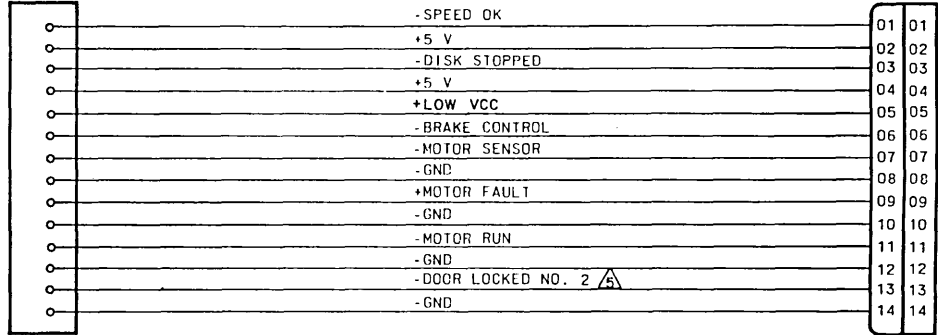
A



B

B

A

MOTOR
SPEED CONTROL



MAGNETIC PERIPHERALS INC. 	MOTOR SPEED CONTROL TO CONTROL BOARD TRAILING CABLE TYPE: _PMX	SMALL DISK DIVISION	C	83324640	B	
		CODE IDENT 19333	CROSS REF NO	0605	SHEET 5	1-121

4

|

3

4

2

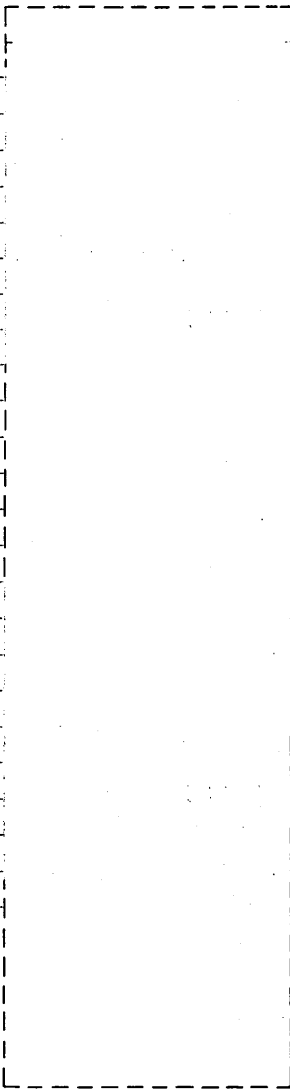
|

1

SIGNAL INPUTS

SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS		
0402	J29-03	0402	J29-03	24 >> J31
0402	J29-04	0402	J29-04	23 >> J31
0406	J29-26	0406	J29-26	01 >> J31
0406	J29-24	0406	J29-24	03 >> J31
0406	J29-22	0406	J29-22	05 >> J31
0420	J29-21	0420	J29-21	06 >> J31
0406	J29-20	0406	J29-20	07 >> J31
1002	P15-01	1002	P15-01	06 >> J36
NC		NC		05 >> J46
1002	P15-02	1002	P15-02	05 >> J36
0205	P27-12	0205	P27-12	12 >> J27
0202	P27-15	0211	P27-15	15 >> J27
0202	P27-18	0211	P27-18	18 >> J27
NC		NC		09 >> J31
0402	J29-15	0402	J29-15	12 >> J31
0402	J29-12	0402	J29-12	15 >> J31
NC		NC		19 >> J31
NC		NC		22 >> J31
0402	J29-01	0402	J29-01	26 >> J31
0402	J29-02	0402	J29-02	25 >> J31
1002	P15-03	1002	P15-03	04 >> J36
NC		NC		01 >> J36
NC		NC		02 >> J36
NC		NC		03 >> J36



J46 >> 04 NC -
 J46 >> 06 NC -

LOGIC CROSS REFERENCE INFORMATION

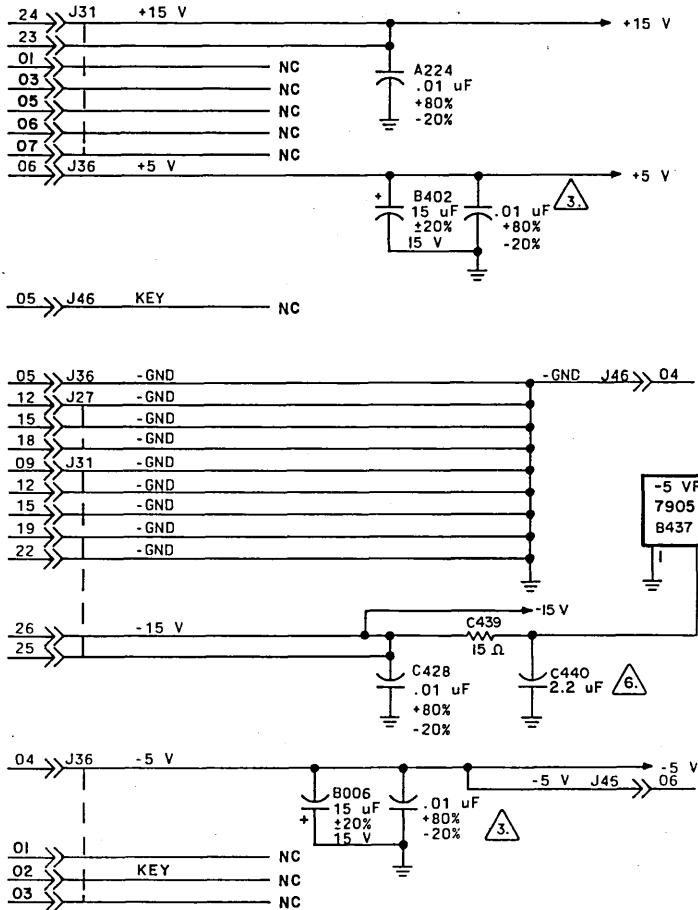
PUB 83324640		REV H
CROSS REF NO 0701	PAGE 1-122	

UNUSED LOGIC ELEMENT		
TYPE	LOCATION	OUTPUT PIN(S)
74LS05	A642	6, 8, 10
10123	B905	2, 15
10124	E449	12

UNUSED RESISTOR PACKS	
LOCATION	PIN(S)
B832	2,3
B847	4,7,8
D205	6,8
D246	4
E430	1,2
B913	6

FILTER CAPS ³

.01 uF	
+5	-5
B918	C003
A227	C703
A357	C720
D254	E610
B203	E621
A846	E641
	D247
	D140
	C430
	B840
	B213



PART NO RANGE	REVISION RECORD						
	REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
00 THRU 99	01	DJ03024A	PRE-RELEASED		6/1/82		II
	02	DJ03012	CHK TIME DELAY	DLM	3-3-82	DGD	II
	A	DJ23000 DJ03034B	RELEASED	DLM	9-15-82	DGD	II
	B	DT03115	DELETE TP'S	DLM	11-6-82	DGD	II
	C	DJ03132	ADD PIN TO SHIT REF	DLM	10-16-82	DGD	III
	D	DJ03133	BPGX TO CPGX	MJ	3-8-83		
	E	DJ03184	CPGX TO DPGX	MJ	3-8-83		
	F	DT03115	DPGX TO FPGX	MJ	3-8-83		
	G	DJ03436	FPGX TO GPGX	FA	2/6/84		
	H	DJ03570	ADD CAPACITOR	JG	6-25-84		
	J	DJ05814	MOVE COMPONENTS	JG	6-25-84		
	K	DJ03047	CORRECTIONS	SA	2-26-85		
	L	DJ03790	DELETE TEST POINT PINS	SA	2-26-85		

NOTES:

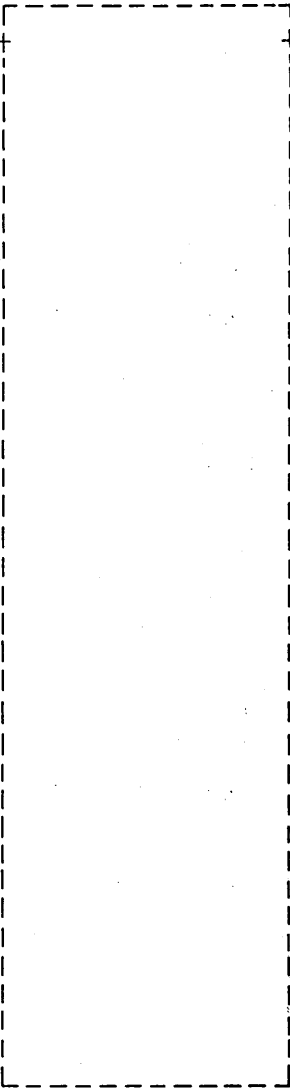
- UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GROUND AND PIN 14 CONNECTED TO +5V.
ALL 16 PIN IC'S HAVE PINS 1 & 16 CONNECTED TO GROUND AND PIN 8 CONNECTED TO -5V.
ALL DIODES SILICON, 24553500.
ALL TRANSISTOR ARRAY, MPQ2369, NPN, 50213300.
ALL RESISTOR PACK RESISTORS, 1/8W ±3%.
ALL DELAY LINES 94393900.
- TRANSISTOR ARRAY, MPQ4258, P.P.P. 1516543.
- SEE TABLE FOR .01uF FILTER CAPACITOR LOCATIONS.
- DELAY TIME FOR REFERENCE ONLY.
- UNUSED PIN OF IC'S XC32201

CODE	INPUT PIN & NAME	OUTPUT PIN & NAME
-02	4 RESET	11 2ND:2 OUT
-02	7 RESET COMP	12 2ND:4 OUT
-02	6 2ND:4 IN	27 SYNC'D WRT GATE
-02		27 SYNC'D WRT GATE DELAYED
-07	32 SYNC'D WRT GATE DELAYED	22 WRT ENABLE
-07		11 SHIFT CLOCK
-07		20 SYNC CHECK
-07		19 ERROR
-07		18 -DECODED DATA
-07		17 +DECODED DATA
-08	33 RESET	29 COIN INC FREQ
-08	5 (INC + DEC FREQ) DELAYED	24 COIN FREQ
-08		12 (INC + DEC FREQ)
- REGULATOR B437 AND CAPACITORS C440, A941 ARE NOT ON B/C/D/FPGX BOARDS.

REFERENCE DRAWING		MAGNETIC PERIPHERALS INC.		TITLE	
COMP ASSY	54332901	GD		SCHEMATIC DIAGRAM	
CTR	54333101	FIRST USED ON		READ/WRITE PLOQ	
		NEXT ASSEMBLY		TYPES: B/C/D/GPGX	
		PA3A1-A, PA5A1-A			
COMPONENTS EXCEPT AS NOTED		DWN	F. AUDETTE	4/19/82	
TOLERANCE	VALUE	RATING	CHKD	DG-D	5-18-82
RES	±5%	OHMS 1/4 W	FNGR	2/11/82	5-18-82
CAP	±10%		MFG	K. M. O'Brien	4/20/82
IND	±10%		QA	M. B. O'Brien	4/20/82
SMALL DISK DIVISION	C	SIZE	83324640	G	
FBCN NO.	CROSS REF NO 0701	SHEET 1 OF 6	PAGE 1-123		

SIGNAL INPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>			
0206	P27-07	0212	P27-07	07	>> J27
0202	P27-20	0211	P27-20	20	>> J27
0202	P27-19	0211	P27-19	19	>> J27
0202	P27-17	0211	P27-17	17	>> J27
0202	P27-16	0211	P27-16	16	>> J27

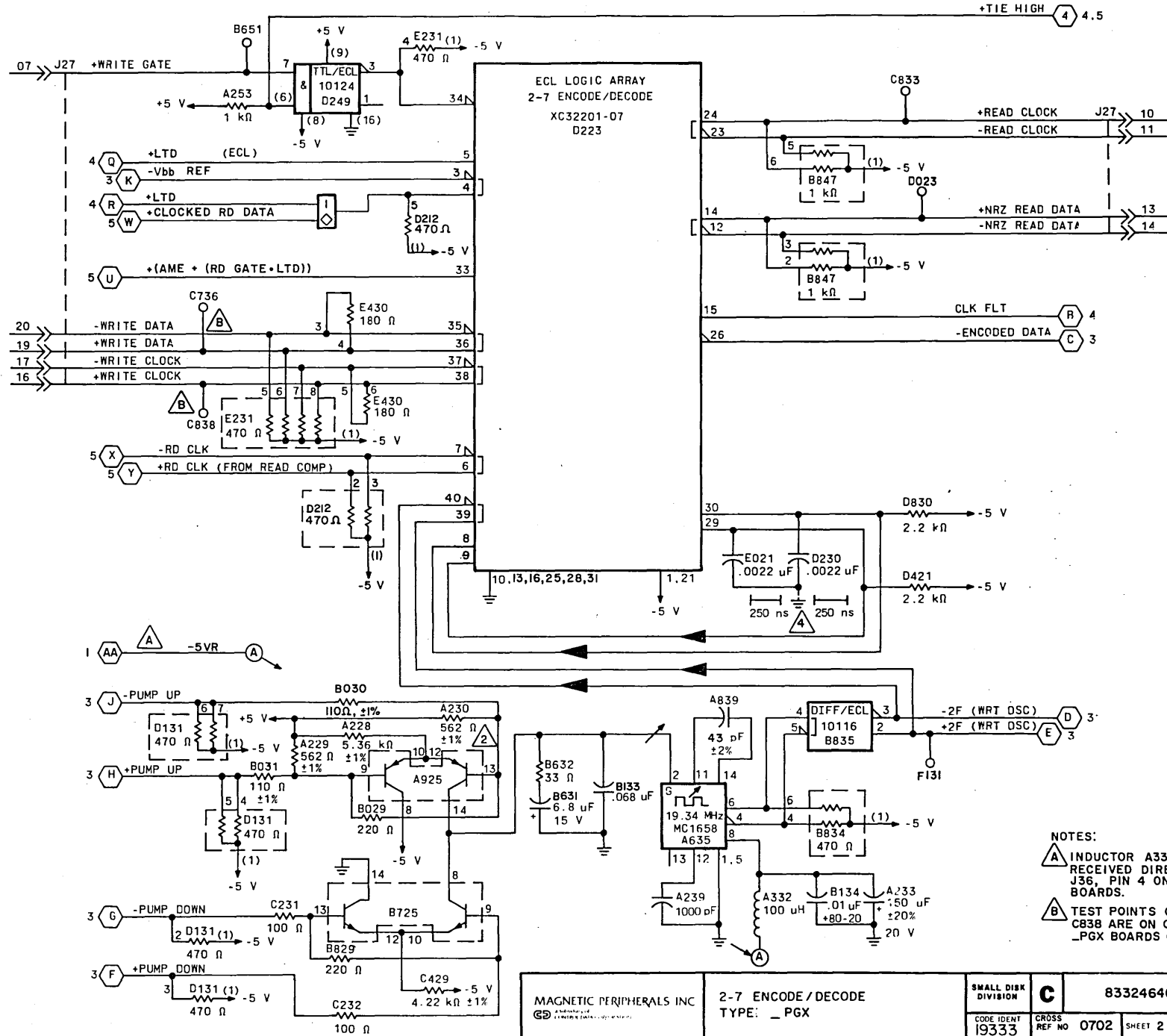


SIGNAL OUTPUTS

J27	>>	10	0205	P27-10
J27	>>	11	0205	P27-11
J27	>>	13	0205	P27-13
J27	>>	14	0205	P27-14

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV B
CROSS REF NO 0702	PAGE 1-124	



- NOTES:
- A INDUCTOR A332 INPUT IS RECEIVED DIRECTLY FROM J36, PIN 4 ON B/C/D/FPGX BOARDS.
 - B TEST POINTS C736, C838 ARE ON OLDER _PGX BOARDS ONLY.

MAGNETIC PERIPHERALS INC A subsidiary of GE	2-7 ENCODE / DECODE TYPE: _ PGX	SMALL DISK DIVISION	C	83324640	G
CODE IDENT I9333	CROSS REF NO 0702	SHEET 2	I-125		

B54333001

D

D

C

C

B

A

4

1

3

A

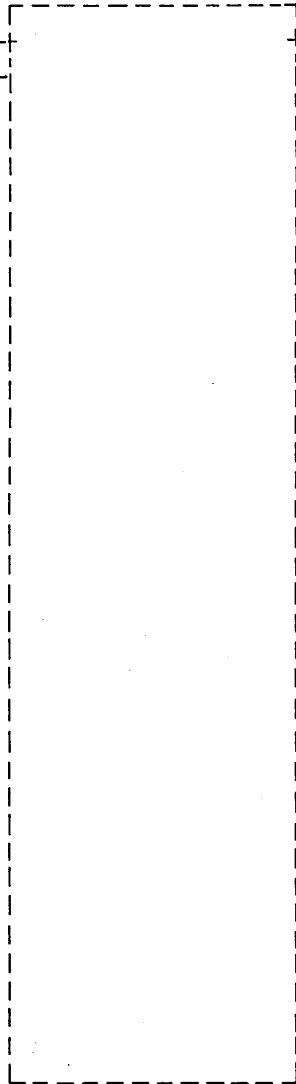
2

1

1

SIGNAL INPUTS

0414 J29-16 11 ->> J31
0414 J29-17 10 ->> J31



SIGNAL OUTPUTS

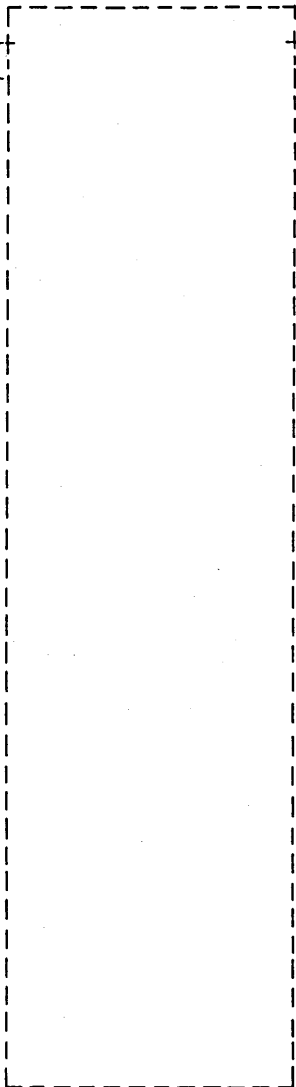
J31 ->> 16 0802 J30-16
J31 ->> 17 0802 J30-17
J31 ->> 13 0410 J29-14
J31 ->> 14 0410 J29-13
J27 ->> 02 0205 P27-02
J27 ->> 01 0205 P27-01

LOGIC CROSS REFERENCE INFORMATION

PUB		REV	
83324640		B	
CROSS REF NO	PAGE		
0703	1-126		

SIGNAL INPUTS

0414 J29-16 11 >> J31
0414 J29-17 10 >> J31

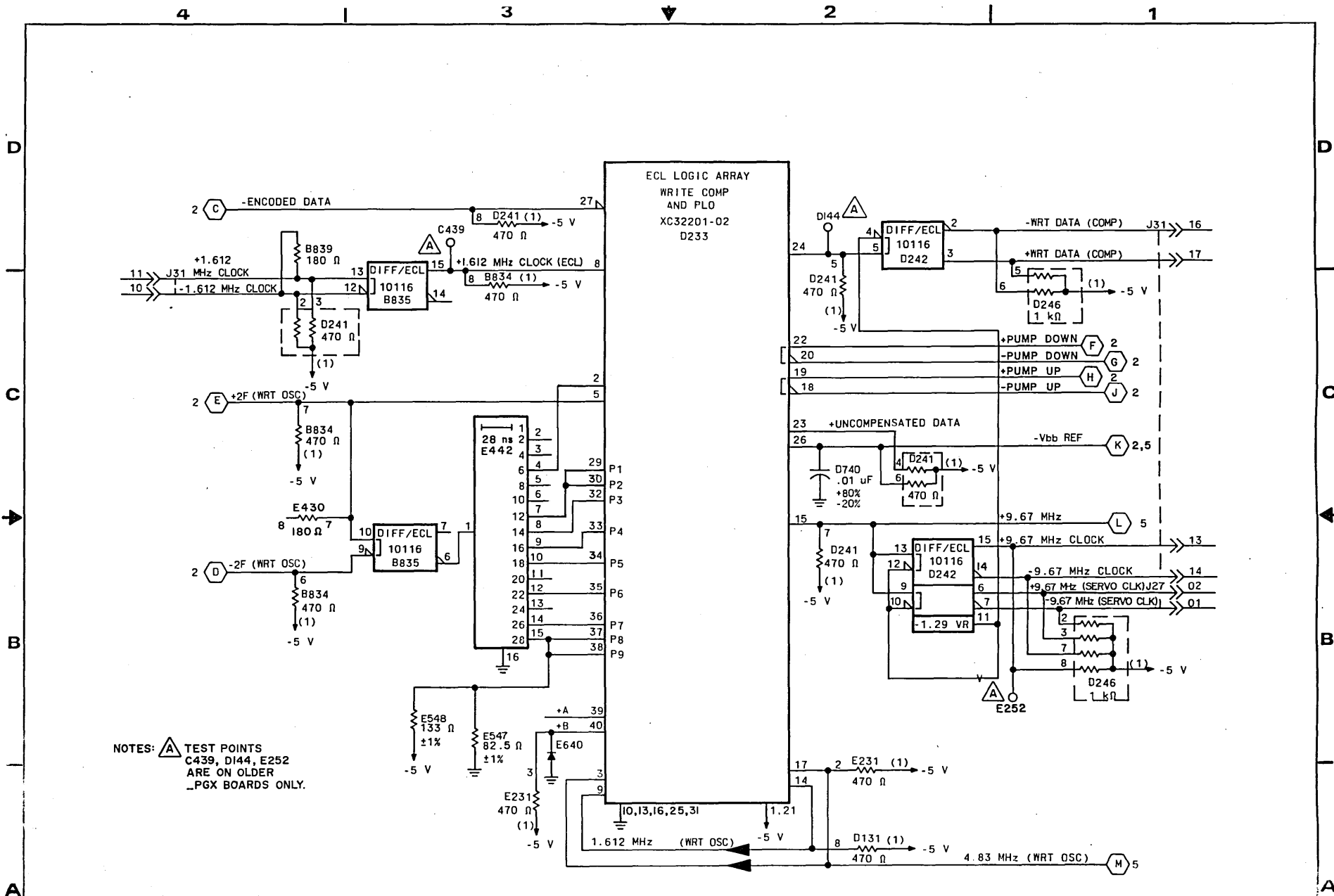


SIGNAL OUTPUTS

J31 >> 16 0802 J30-16
J31 >> 17 0802 J30-17
J31 >> 13 0410 J29-14
J31 >> 14 0410 J29-13
J27 >> 02 0205 P27-02
J27 >> 01 0205 P27-01

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	C
CROSS REF NO	0703	PAGE	1-128



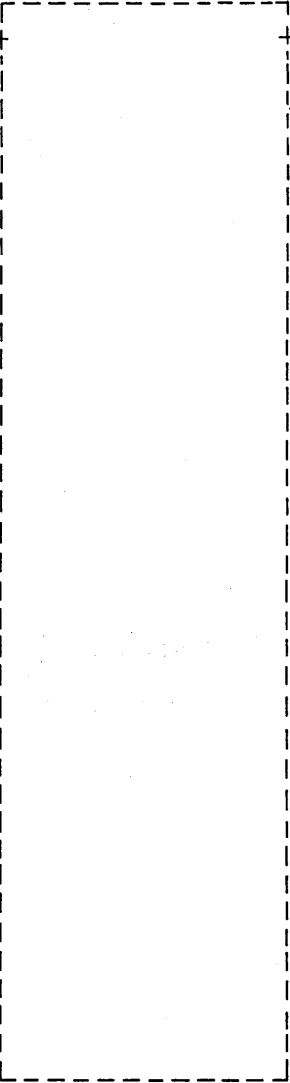
NOTES: **A** TEST POINTS
 C439, D144, E252
 ARE ON OLDER
 _PGX BOARDS ONLY.

APPLIES TO ALL _PGX CARDS EXCEPT B/C/DPGX.

MAGNETIC PERIPHERALS INC <small>AN INDUSTRY OF GENERAL ELECTRIC CORPORATION</small>	WRITE COMP & PLO TYPE: _PGX		SMALL DISK DIVISION	C	83324640	G
	CODE IDENT 19333	CROSS REF NO 0703	SHEET 3	I-1281		

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS			
0803	J30-08	0803	J30-08	08	J31
0206	P27-06	0212	P27-06	06	J27
0206	P27-09	0212	P27-09	09	J27

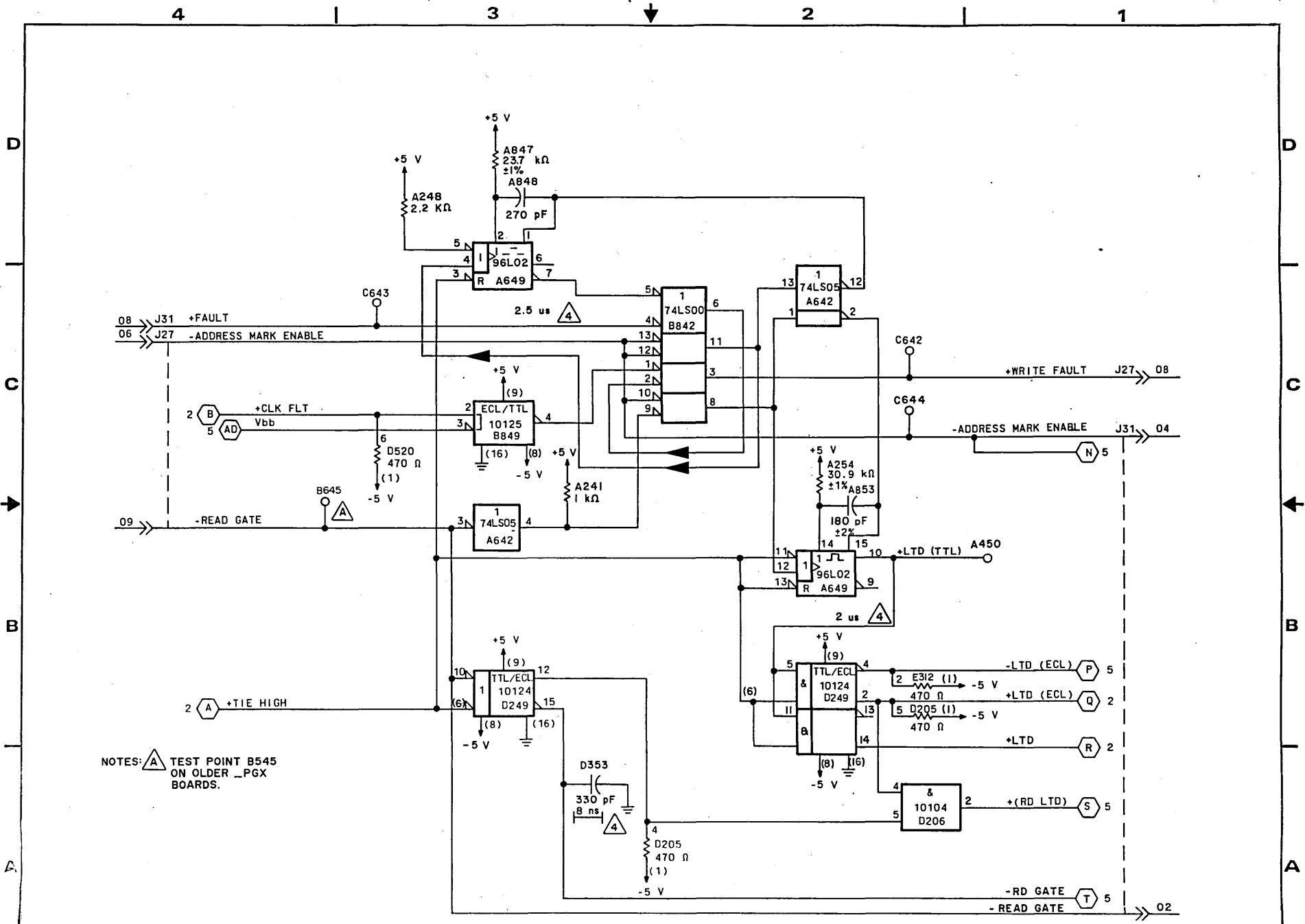


SIGNAL OUTPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS	
0206	P27-08	0212	P27-08
0807	J30-04	0807	J30-04
NC	-	NC	-

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	C
CROSS REF NO	0704	PAGE	1-128.2



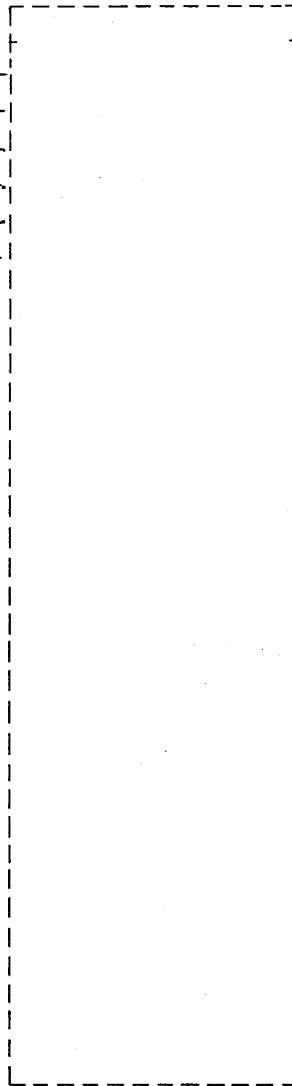
NOTES: **A** TEST POINT B545 ON OLDER _PGX BOARDS.

SIGNAL INPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>			
0206	P27-03	0212	P27-03	03	>> J27
0206	P27-04	0212	P27-04	04	>> J27
0808	J30-20	0808	J30-20	20	>> J31
0808	J30-21	0808	J30-21	21	>> J31
NC	-	NC	-	03	>> J46
NC	-	NC	-	02	>> J46

SIGNAL OUTPUTS

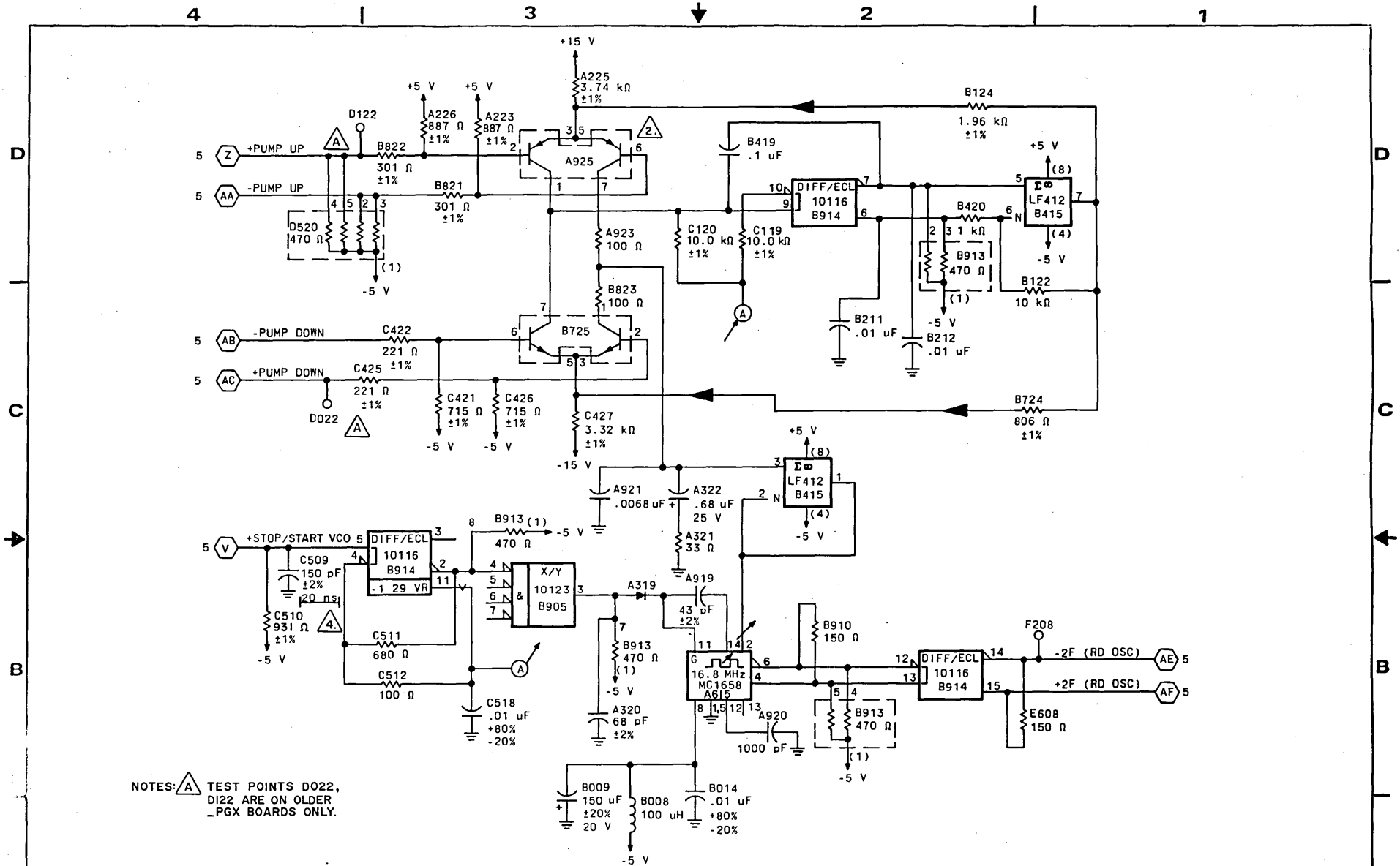
<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
0207*	P27-05	0204	P27-05
NC	-	NC	-



*0204 on B/C/E/FEBN boards.

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0705	PAGE 1-130	

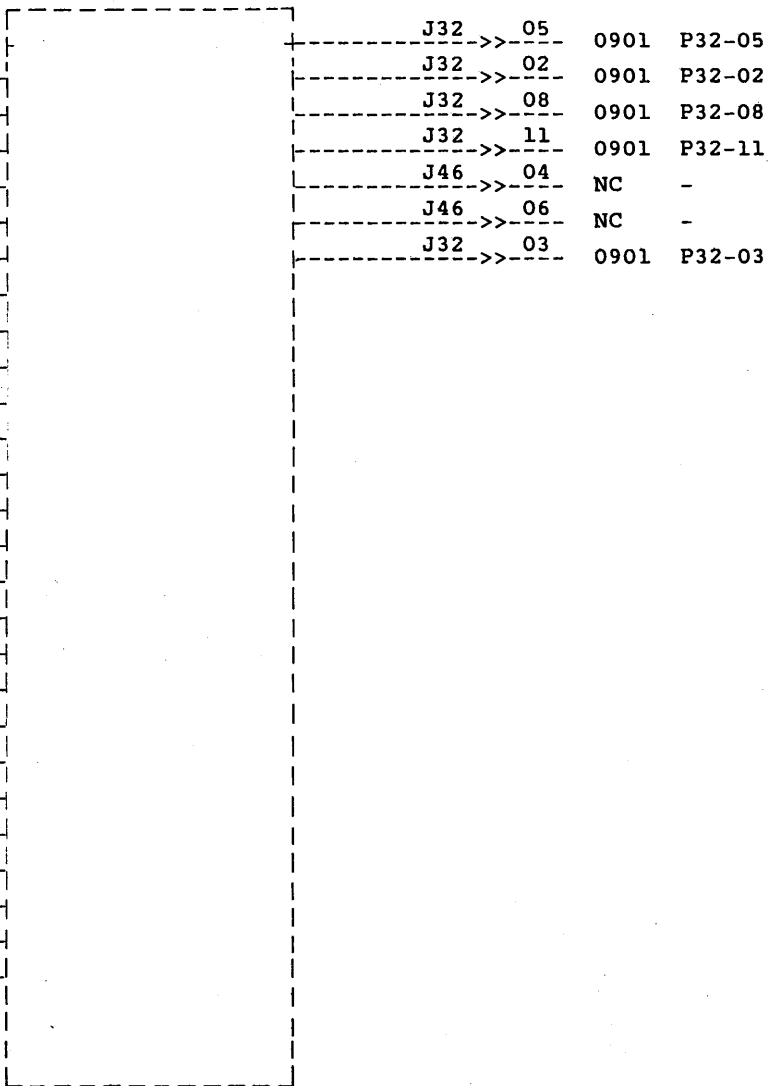


NOTES: **A** TEST POINTS D022, D122 ARE ON OLDER _PGX BOARDS ONLY.

SIGNAL INPUTS

SIGNAL OUTPUTS

SINGLE		DUAL		
CHANNEL	UNITS	CHANNEL	UNITS	
0402	J29-03	0402	J29-03	24 >> J30
0402	J29-04	0402	J29-04	23 >> J30
NC	J29-11	NC	J29-11	16 >> J30
NC	J29-10	NC	J29-10	17 >> J30
NC	J29-07	NC	J29-07	20 >> J30
NC	J29-06	NC	J29-06	21 >> J30
NC	J29-19	NC	J29-19	08 >> J30
1002	P15-01	1002	P15-01	06 >> J36
NC	-	NC	-	04 >> J33
NC	-	NC	-	05 >> J46
1002	P15-02	1002	P15-02	05 >> J36
0205	P27-12	0205	P27-12	12 >> J27
0202	P27-15	0211	P27-15	15 >> J27
0202	P27-18	0211	P27-18	18 >> J27
NC	J29-18	NC	J29-18	09 >> J30
0402	J29-15	0402	J29-15	12 >> J30
0402	J29-12	0402	J29-12	15 >> J30
NC	J29-08	NC	J29-08	19 >> J30
NC	J29-05	NC	J29-05	22 >> J30
NC	J29-23	NC	J29-23	04 >> J30
1002	P15-03	1002	P15-03	04 >> J36
NC	-	NC	-	01 >> J36
NC	-	NC	-	02 >> J36
NC	-	NC	-	03 >> J36
0402	J29-01	0402	J29-01	26 >> J30
0402	J29-02	0402	J29-02	25 >> J30



J32	>>	05	0901	P32-05
J32	>>	02	0901	P32-02
J32	>>	08	0901	P32-08
J32	>>	11	0901	P32-11
J46	>>	04	NC	-
J46	>>	06	NC	-
J32	>>	03	0901	P32-03

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0751	PAGE	1-134

UNUSED LOGIC ELEMENTS

ELEMENT	LOCATION	OUTPUT PIN(S)
10123	B905	2,15
74LS05	A642	6,10
74LS05	G456	10
10124	D249	13,14

UNUSED RESISTOR PACKS

LOCATION	PIN(S)
B734	2,3
B847	4,7,8
B913	6
D205	6,8
E430	1,2,7,8

FILTER CAPS Δ

.01 μ F		
+5 V		-5 V
A227	B213	E641
A255	B440	G403
A846	C003	G413
B203	C430	G422
B918	C703	G831
D254	C720	H723
G560	D140	J925
H153	E610	K037
H727	E621	
H960		
J413		
K036		

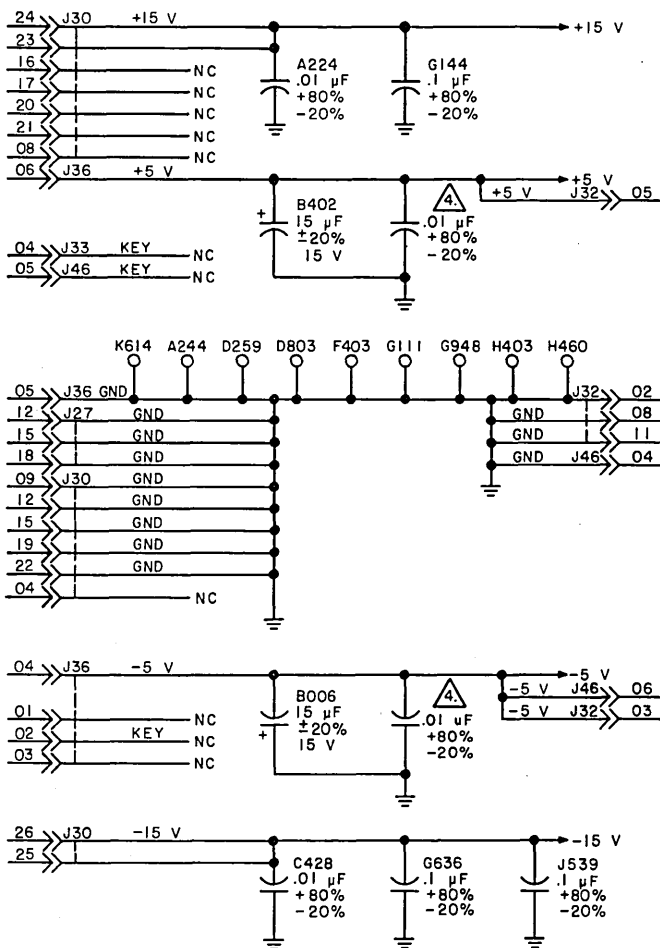
UNUSED TRANSISTOR ARRAY

TYPE	LOCATION	PIN'S
MPQ2907	H849	12,13,14

PART NO. RANGE Δ		REVISION RECORD					
REV	ECO	DESCRIPTION	DRAFT	DATE	CHKD	APP	
02 THRU 02		A DJ23000 DJ03882	CLASS A RELEASED BY ECO	MJ	9-24-85		
		B DJ03906	CHG ARUX BB NOTES	CB	11-7-85		

NOTES:

1. UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GROUND AND PIN 14 CONNECTED TO +5 V.
ALL 16 PIN IC'S HAVE PINS 1 AND 16 CONNECTED TO GROUND AND PIN 8 CONNECTED TO -5 V.
ALL DIODES SILICON, 24553500.
ALL TRANSISTOR ARRAYS, MPQ2369, NPN, 50213300.
ALL RESISTOR PACK RESISTORS, 1/8 W, \pm 3%.
ALL DELAY LINES, 28 ns, 94393900.
- Δ 2. TRANSISTOR ARRAY, MPQ4258, PNP, 15165543.
- Δ 3. DELAY TIME FOR REFERENCE ONLY.
- Δ 4. SEE TABLE FOR .01 μ F FILTER CAPACITOR LOCATIONS.
- Δ 5. DRAWINGS WHERE TAB NUMBERS CREATE NEW COVER SHEET, TABS 00-99 ARE RESERVED.
- Δ 6. TRANSISTOR ARRAY, PNP, MPQ2907, 50212700.
- Δ 7. DELAY LINE, 100 ns, 94262303.
- Δ 8. DIODE 50241403.
- Δ 9. IC TYPE 96L02 HAS PIN 8 CONNECTED TO GROUND AND PIN 16 CONNECTED TO +5 V.
- Δ 10. TEST SELECT CAPACITORS TO BE SELECTED FROM DRAWING 41286560 AND INSERTED DURING CARD TEST PER CARD TEST REQUIREMENTS.
- Δ 11. DIODE 24553502.

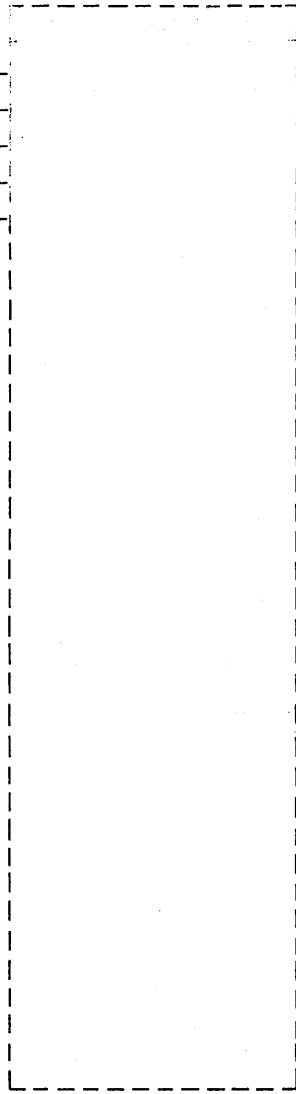


REFERENCE DRAWING				MAGNETIC PERIPHERALS, INC. a Control Data Company		TITLE	
COMP ASSY 54356902				FIRST USED ON		SCHEMATIC DIAGRAM	
CTR 54357102				PA3A1 - A		READ/WRITE PLOS	
				NEXT ASSEMBLY		DATA LATCH	
				PA5A1 - A		TYPE ARUX/CRUX	
COMPONENTS, EXCEPT AS NOTED				DWN	M. A. JAHN	DRAWING NO.	
TOLERANCE	VALUE	RATING	CHKD		83324640		
RES	\pm 5%	OHMS	1/4 W	ENGR	CHANDLER/MCMAN	9-24-85	
CAP	\pm 10%			MFG			
IND	\pm 3%			QA			
ZEN	\pm 5%						
FSCM NO. 19333				0751		SHEET 1 OF 9	
						1-134.1	

B543570024

SIGNAL INPUTS

SINGLE CHANNEL UNITS		DUAL CHANNEL UNITS		
0206	P27-07	0212	P27-07	07 >> J27
0202	P27-20	0211	P27-20	20 >> J27
0202	P27-19	0211	P27-19	19 >> J27
0202	P27-17	0211	P27-17	17 >> J27
0202	P27-16	0211	P27-16	16 >> J27



SIGNAL OUTPUTS

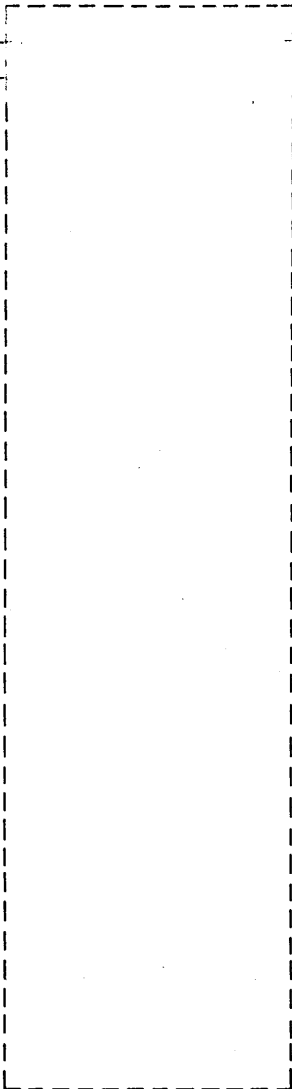
J27 >>	10	0205	P27-10
J27 >>	11	0205	P27-11
J27 >>	13	0205	P27-13
J27 >>	14	0205	P27-14

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0752	PAGE	1-134.2

SIGNAL INPUTS

0414 J29-16 11 >> J30
0414 J29-17 10 >> J30

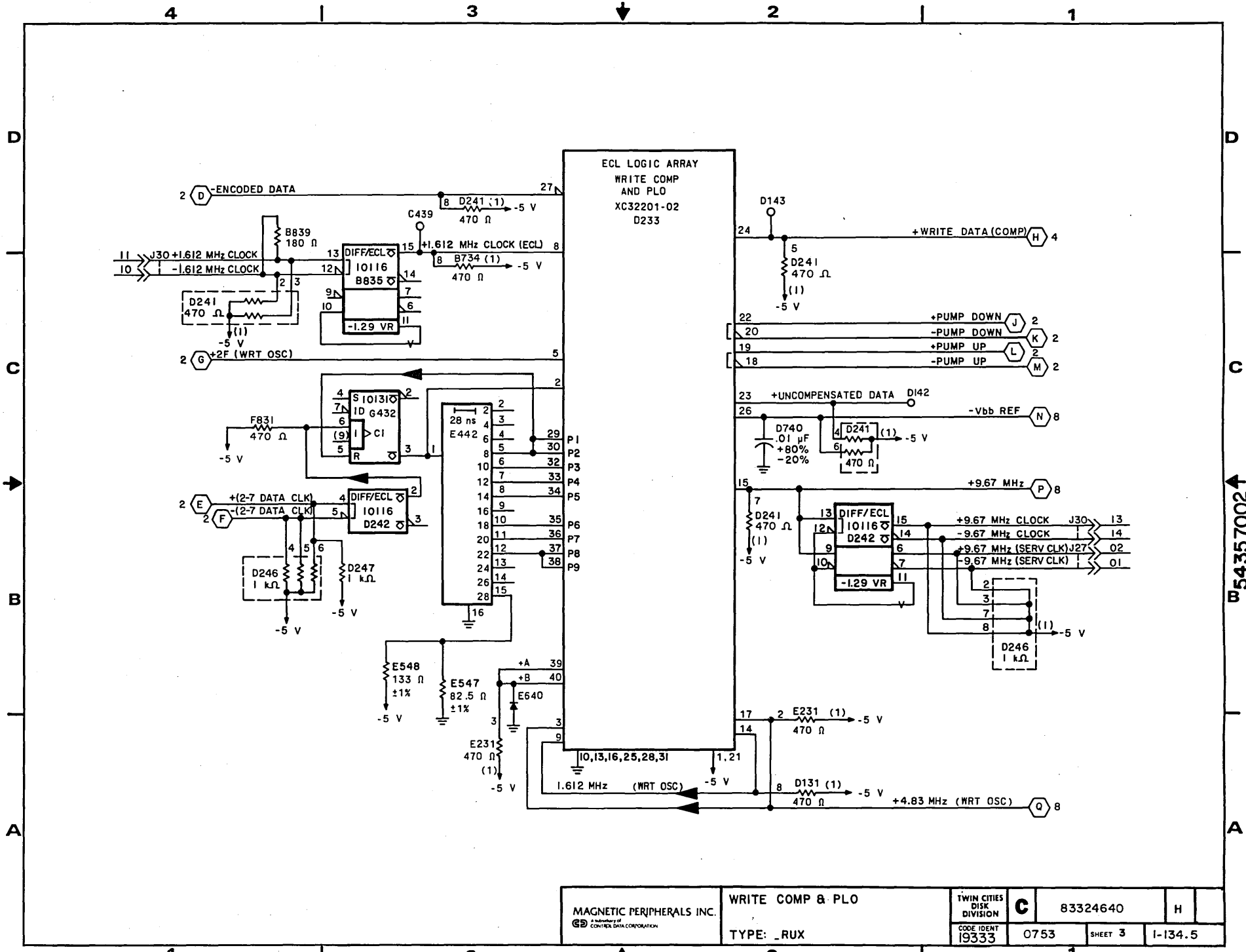


SIGNAL OUTPUTS

J30 >> 13 0410 J29-14
J30 >> 14 0410 J29-13
J27 >> 02 0205 P27-02
J27 >> 01 0205 P27-01

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0753	PAGE	1-134.4

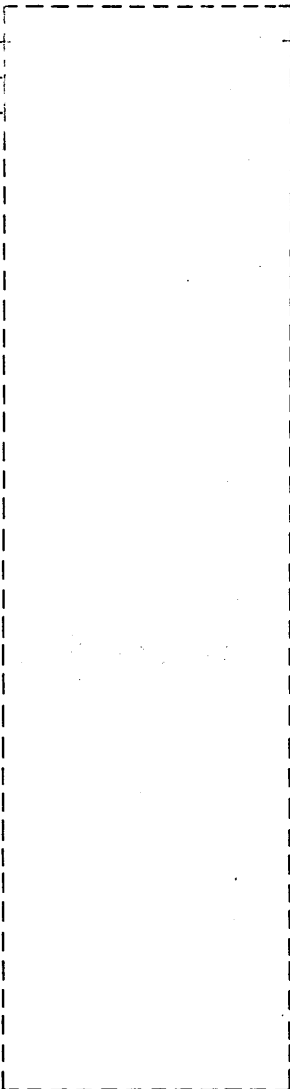


MAGNETIC PERIPHERALS INC. <small>a subsidiary of CONVUL DATA CORPORATION</small>	WRITE COMP & PLO	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE: RUX	CODE IDENT 19333	0753	SHEET 3	1-134.5

B 54357002 ↑

SIGNAL INPUTS

0409 J29-09 18 >> J30
 0902 P32-10 10 >> J32
 0902 P32-09 09 >> J32

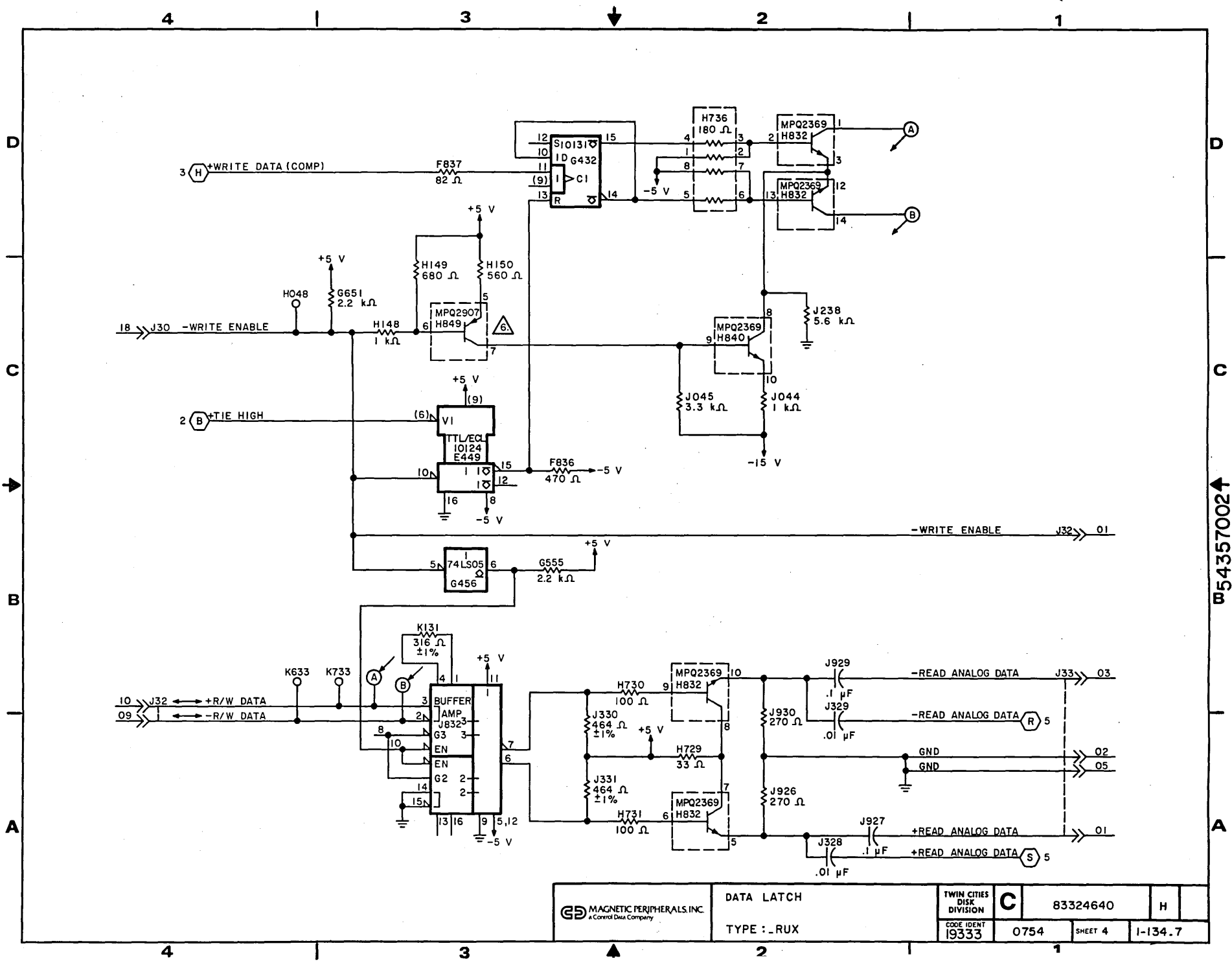


SIGNAL OUTPUTS

J32 >> 01 0902 P32-01
 J33 >> 03 NC -
 J33 >> 02 NC -
 J33 >> 05 NC -
 J33 >> 01 NC -

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640	REV	H
CROSS REF NO	0754	PAGE	1-134.6	

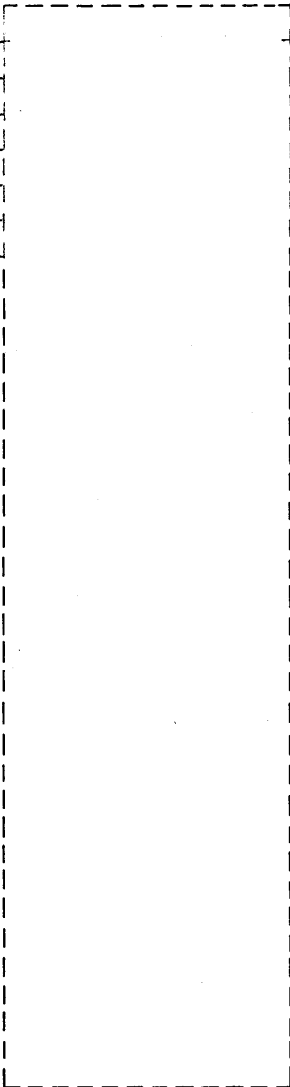


MAGNETIC PERIPHERALS, INC. <small>a Corvair Data Company</small>	DATA LATCH		TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE: -RUX		CODE IDENT 19333			

W54357002↑

SIGNAL INPUTS

0420	J29-21	06	>>	J30
NC	P32-04	04	>>	J32
0902	P32-06	06	>>	J32
0406	J29-26	01	>>	J30
0406	J29-24	03	>>	J30
0406	J29-22	05	>>	J30
0406	J29-20	07	>>	J30

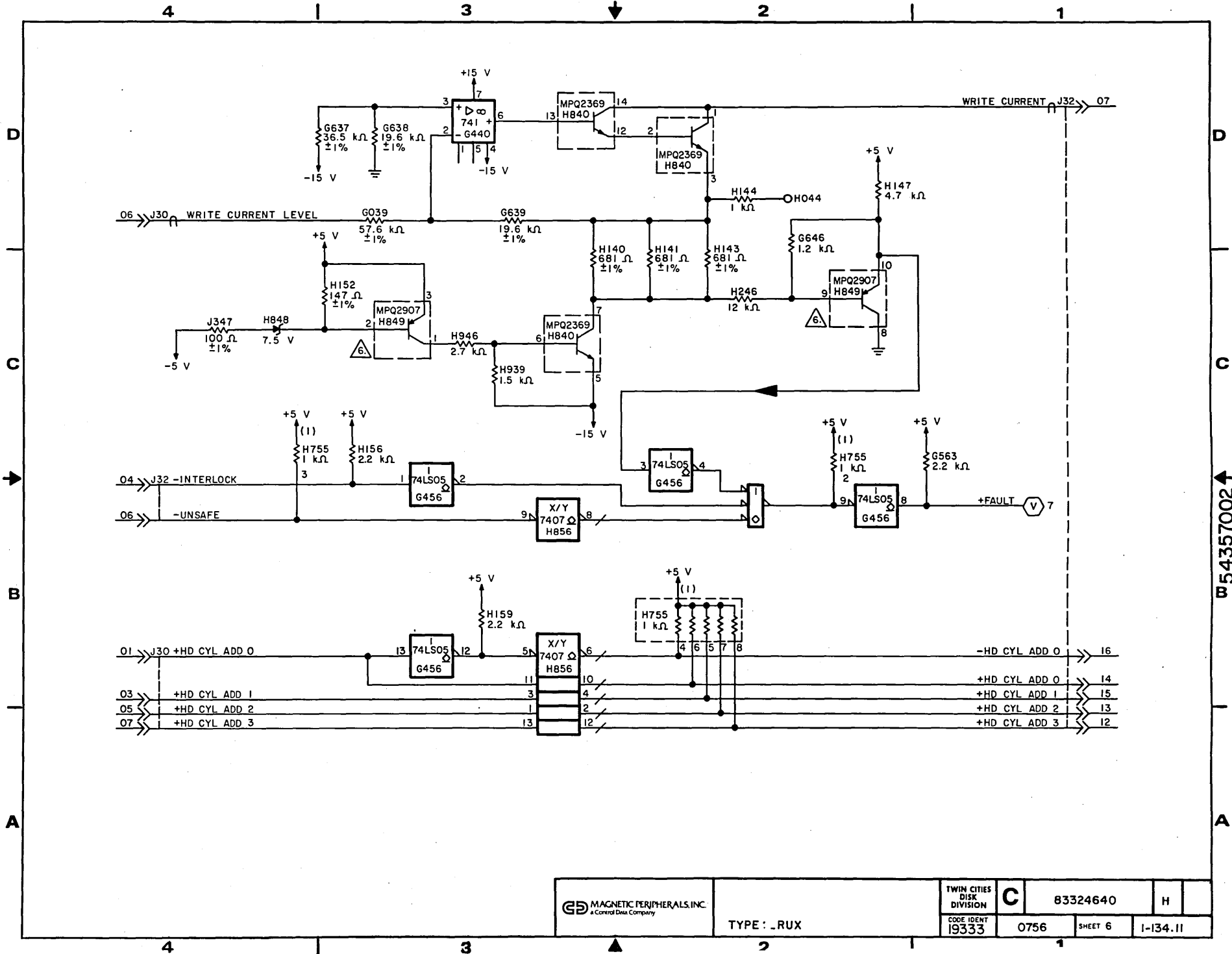


SIGNAL OUTPUTS

J32	>>	07	0902	P32-07
J32	>>	16	0902	P32-16
J32	>>	14	0902	P32-14
J32	>>	15	0902	P32-15
J32	>>	13	0902	P32-13
J32	>>	12	0902	P32-12

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0756	PAGE	1-134.10

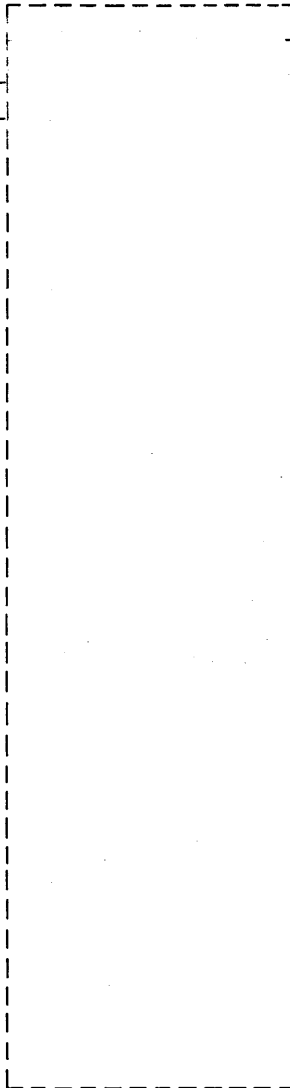


B54357002↑

SIGNAL INPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
0206	P27-06	0212	P27-06
0206	P27-09	0212	P27-09

06 >> J27
 09 >> J27



SIGNAL OUTPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
0206	P27-08	0212	P27-08
NC	J29-25	NC	J29-25

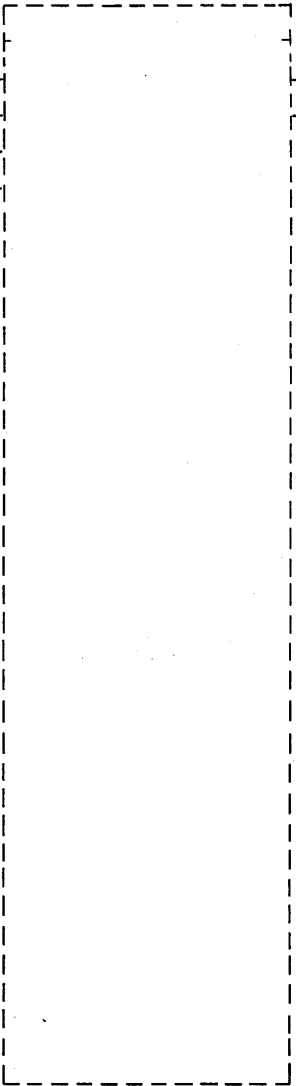
J27 >> 08
 J30 >> 02

LOGIC CROSS REFERENCE INFORMATION

PUB		REV	
83324640		H	
CROSS REF NO	0757	PAGE	1-134.12

SIGNAL INPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>			
0206	P27-03	0212	P27-03	03	>> J27
0206	P27-04	0212	P27-04	04	>> J27
NC	-	NC	-	03	>> J46
NC	-	NC	-	02	>> J46



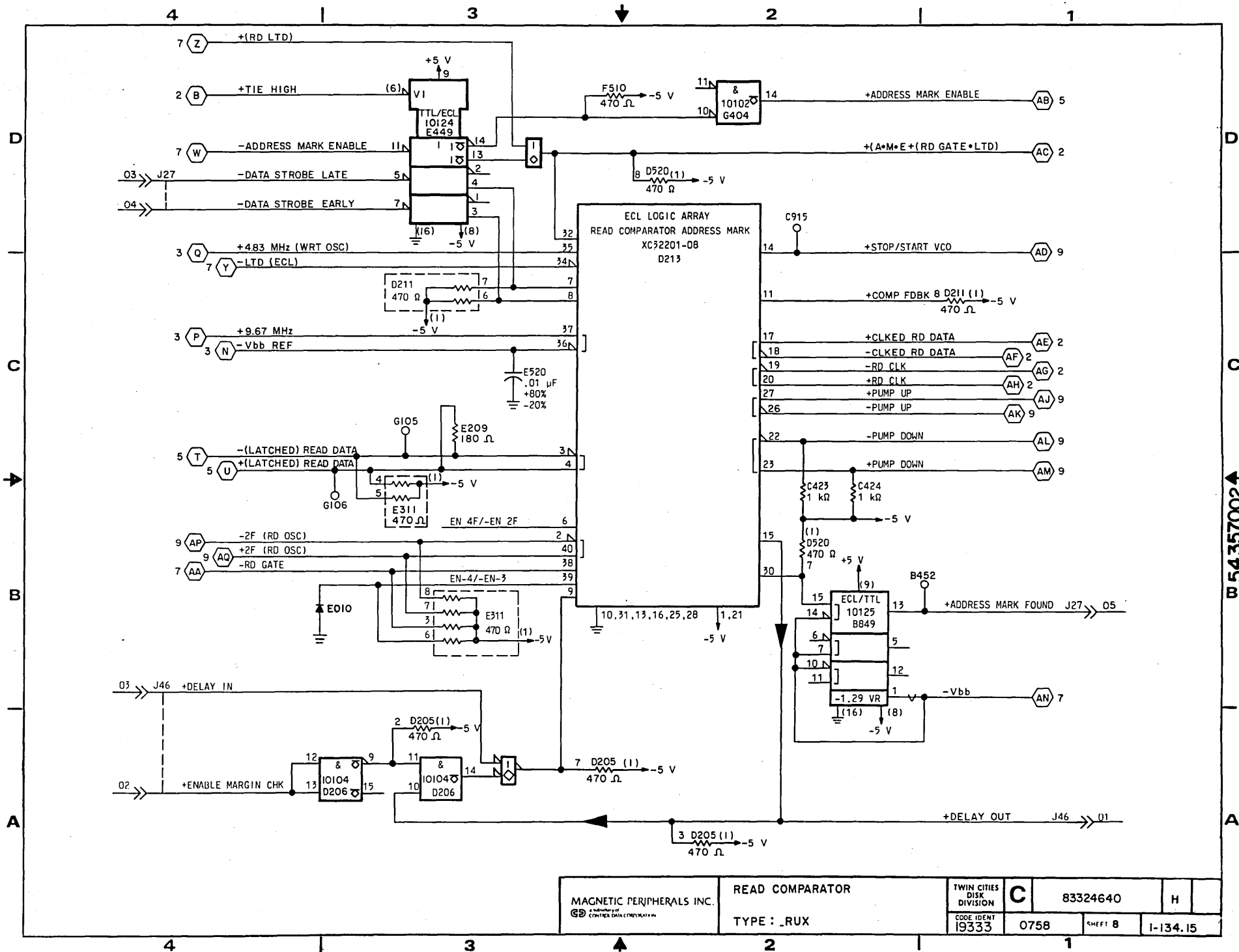
SIGNAL OUTPUTS

<u>SINGLE CHANNEL UNITS</u>		<u>DUAL CHANNEL UNITS</u>	
J27	>> 05	0207*	P27-05
J46	>> 01	0204	P27-05
NC	-	NC	-

*0204 on B/C/E/FEBN board.

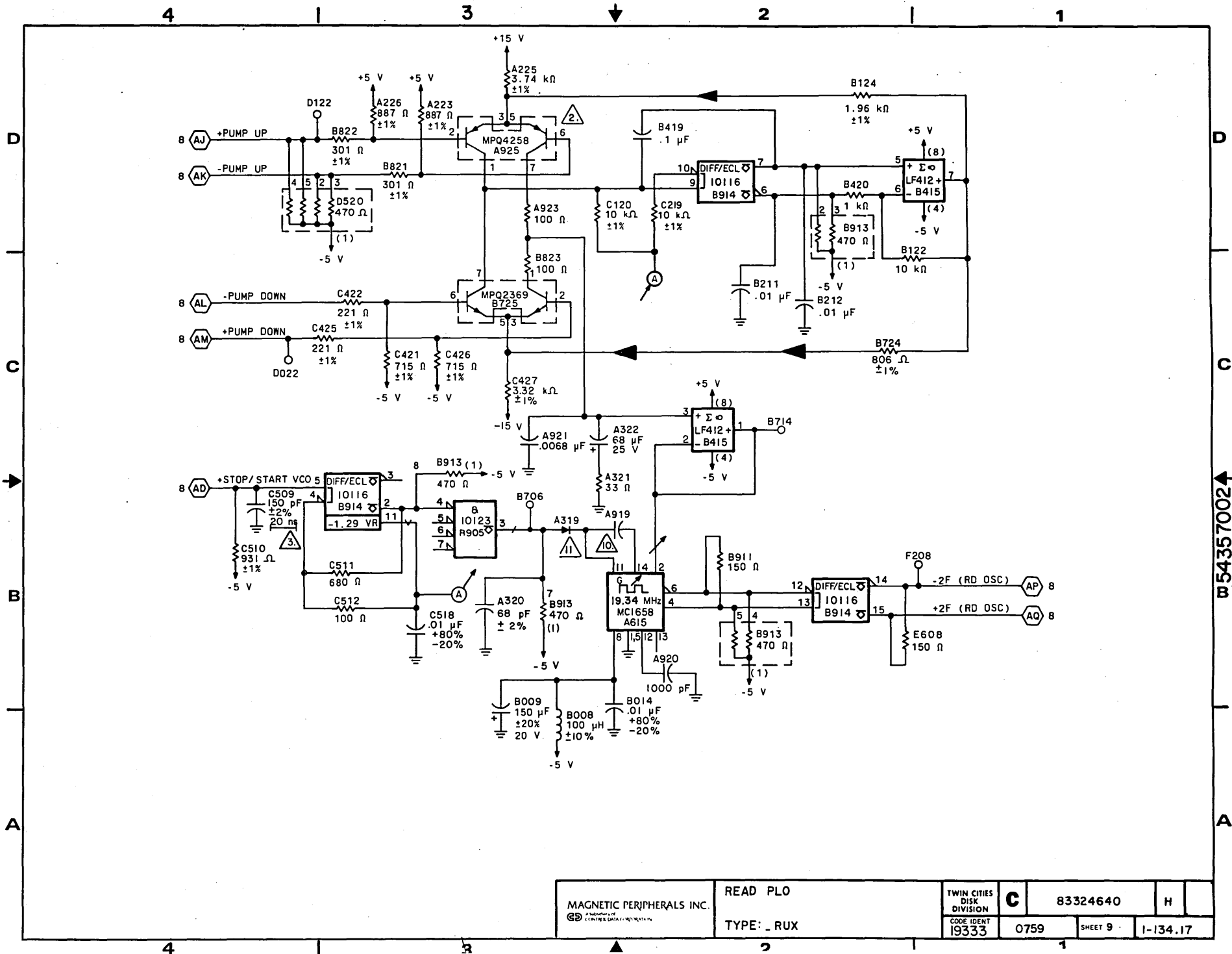
LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV H
CROSS REF NO 0758	PAGE 1-134.14	



B 543570024

MAGNETIC PERIPHERALS INC. a subsidiary of GE CONTROL DATA CORPORATION	READ COMPARATOR	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE : _RUX	CODE IDENT I9333	0758	SHEET 8	I-134.15



MAGNETIC PERIPHERALS INC. A DIVISION OF GEORGE EASTMAN CORPORATION	READ PLO	TWIN CITIES DISK DIVISION	C	83324640	H
	TYPE: RUX	CODE IDENT I9333	0759	SHEET 9	I-134.17

B54357002

SIGNAL INPUTS

0402	J29-04	23	>>	J30
0402	J29-03	24	>>	J30
1002	P15-01	06	>>	J35
NC	-	02	>>	J35
NC	-	01	>>	J35
1002	P15-02	05	>>	J35
1002	P15-03	04	>>	J35
0402	J29-02	25	>>	J30
0402	J29-01	26	>>	J30
NC	-	02	>>	J30
NC	-	09	>>	J30
0414	J29-17	10	>>	J30
0414	J29-16	11	>>	J30
0410	J29-14	13	>>	J30
0410	J29-13	14	>>	J30
0402	J29-15	12	>>	J30
0402	J29-12	15	>>	J30
NC	-	19	>>	J30
NC	-	22	>>	J30

SIGNAL OUTPUTS

J32	>>	04	NC	-
J32	>>	05	0901	P32-05
J32	>>	02	0901	P32-02
J32	>>	08	0901	P32-08
J32	>>	11	0901	P32-11
J32	>>	03	0901	P32-03

LOGIC CROSS REFERENCE INFORMATION

PUB		83324640		REV		H	
CROSS REF NO		0801		PAGE		1-134,18	

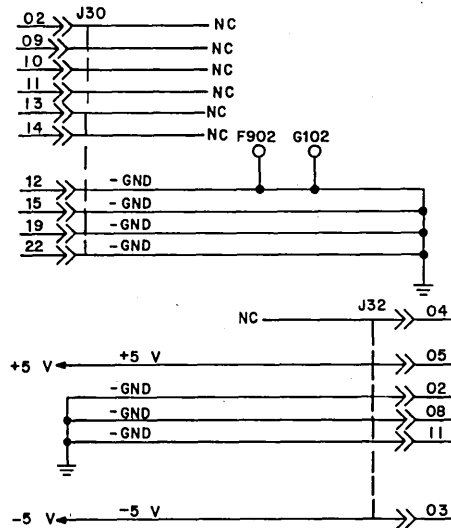
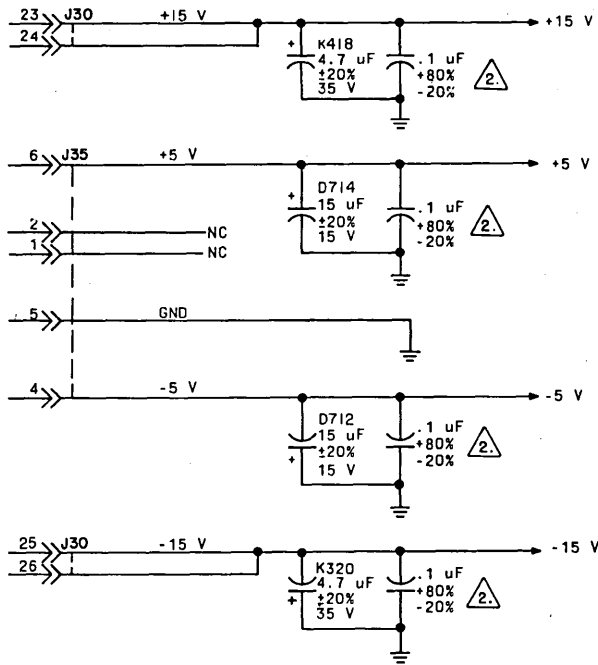
UNUSED LOGIC ELEMENTS		
ELEMENT	LOCATION	OUTPUT PIN(S)
7486	L135	8
7407	M044	12
10131	E647	14, 15

UNUSED TRANSISTOR PACKS		
ELEMENT	LOCATION	PIN(S)
MPQ2907	N326	8, 9, 10
MPQ2369	M226	1, 2, 3
CA3096	F122	7, 8, 9
CA3096	G422	7, 8, 9

FILTER CAPS ²			
.1 uF +80% -20%			
+15 V	+5 V	-5 V	-15 V
E526	L952	D946	K427
K428	F645	D734	L622
L621	F708	F143	M618
M615	F717	F154	
	F722	F709	
	K436	F718	
	K447	D810	
	M806	G134	
		G922	
		J631	
		J823	
		N315	
		M807	

UNUSED RESISTOR PACKS	
LOCATION	PIN(S)
D835	6, 7, 8
E047	5, 8
G336	2, 3, 8
J232	2
M443	6

PART NO RANGE ⁶	REVISION RECORD					
	REV	ECO	DESCRIPTION	DRAFT	DATE	CHKD APP
03 THRU 03		DJ23000	SEE MF HIST FOR REVS A THRU D	CBD	12-3-84	CR -
	E	DJ03721	DIGITIZE CPFY REVISED & REDRAWN	CBD	12-3-84	CR -
	F	DJ03789	DELETE TEST POINT PINS	SA	2-27-85	
	G	DJ03801	CORRECTIONS	CB	5-2-86	



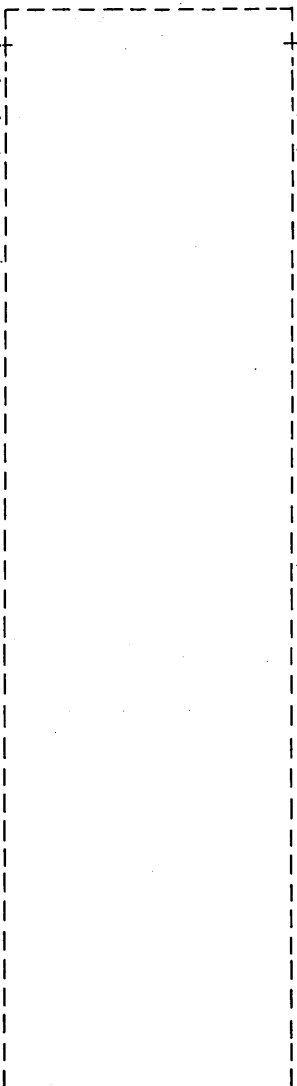
- UNLESS OTHERWISE SPECIFIED:
ALL 14 PIN IC'S HAVE PIN 7 CONNECTED TO GROUND AND PIN 14 CONNECTED TO +5 V.
ALL 16 PIN IC'S HAVE PINS 1 AND 16 CONNECTED TO GROUND AND PIN 8 CONNECTED TO -5 V.
ALL DIODES, 24553500.
ALL TRANSISTORS, SPNP, 2N4258, 15165563.
ALL TRANSISTOR ARRAYS, NPN, MPQ2369, 50213300.
ALL DELAY LINES, 94262303.
ALL DELAY LINES HAVE PIN 7 AND 8 CONNECTED TO GROUND.
ALL RESISTOR PACK RESISTORS, 1/8 W, ±3%.
ALL POTENTIOMETERS, 1/4 W, ±10%.
- SEE TABLE FOR .1 uF FILTER CAPACITOR LOCATIONS.
- TRANSISTOR ARRAY, PNP, MPQ2907, 50212700.
- TRANSISTOR ARRAYS, NPN/PNP, CA3096, 50213100, PIN 16 TO -5 V.
- DELAY TIME FOR REF ONLY.
- DRAWINGS WHERE TAB NUMBERS CREATE NEW COVER SHEET, TABS 00-99 ARE RESERVED.
- MANY COMPONENTS WERE RELOCATED BY ECO DJ03721 EFFECTIVE MARCH 1985. BPFY AND OLDER CPFY BOARDS MAY HAVE COMPONENTS IN OTHER LOCATIONS THAN THOSE SHOWN ON THIS DRAWING.

REFERENCE DRAWING COMP ASSY 54332503*	MAGNETIC PERIPHERALS INC. GD CONTRACT DATA CORPORATION	TITLE SCHEMATIC DIAGRAM DATA LATCH TYPE BPFY/CPFY
CTR 54332703	FIRST USED ON FSD 1	SIZE C
COMPONENTS, EXCEPT AS NOTED	DWN <i>Manu Bartsch</i> 5-29-84	TWIN CITIES DISK DIVISION
TOLERANCE VALUE RATING	CHKD <i>DG Donat</i> 8-8-84	83324640
RES ±5% OHMS 1/4 W	ENGR <i>D. A. Anderson</i> 8-1-84	H
CAP ±10%	MFG	FORM NO. 19333
IND ±3%	QA	0801 SHEET 1 OF 8 PAGE 1-135

B 54332603 A

SIGNAL INPUTS

0703 J31-16 ~~16~~ >> ~~J30~~
 0703 J31-17 ~~17~~ >> ~~J30~~
 0409 J29-09 ~~18~~ >> ~~J30~~
 0902 P32-10 ~~10~~ >> ~~J32~~
 0902 P32-09 ~~09~~ >> ~~J32~~

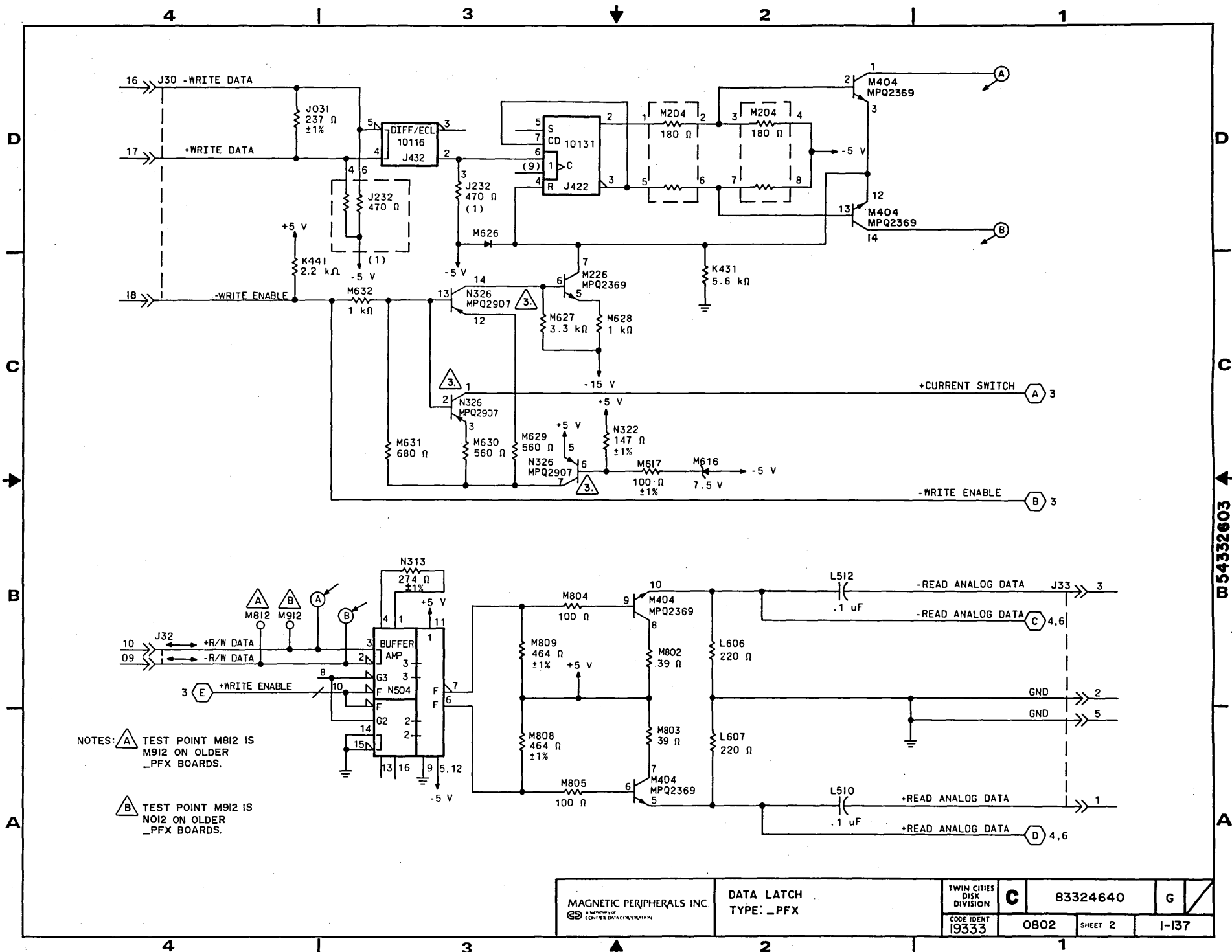


SIGNAL OUTPUTS

~~J33~~ >> ~~03~~ NC -
~~J33~~ >> ~~02~~ NC -
~~J33~~ >> ~~05~~ NC -
~~J33~~ >> ~~01~~ NC -

LOGIC CROSS REFERENCE INFORMATION

PUB 83324640		REV B
CROSS REF NO 0802	PAGE 1-136	



NOTES: **A** TEST POINT MB12 IS MB912 ON OLDER _PFX BOARDS.

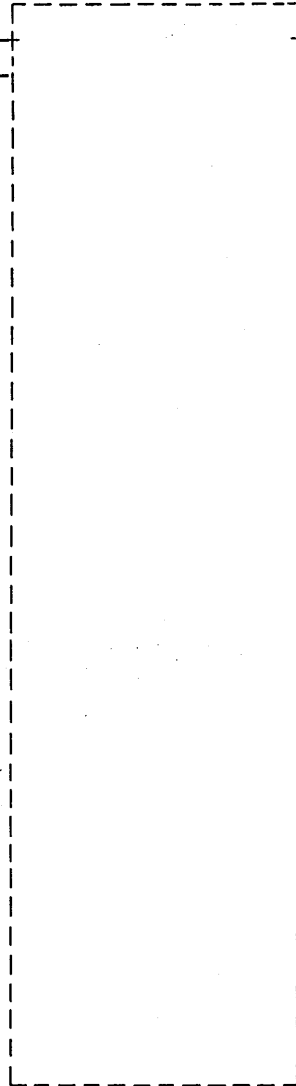
B TEST POINT MB912 IS MB12 ON OLDER _PFX BOARDS.

MAGNETIC PERIPHERALS INC. <small>MEMBERS OF CONTROL DATA CORPORATION</small>	DATA LATCH TYPE: _PFX	TWIN CITIES DISK DIVISION	C	83324640	G
	CODE IDENT 19333	0802	SHEET 2	I-137	

B 54332603

SIGNAL INPUTS

0420 J29-21 -06 >> J30
0902 P32-06 -06 >> J32

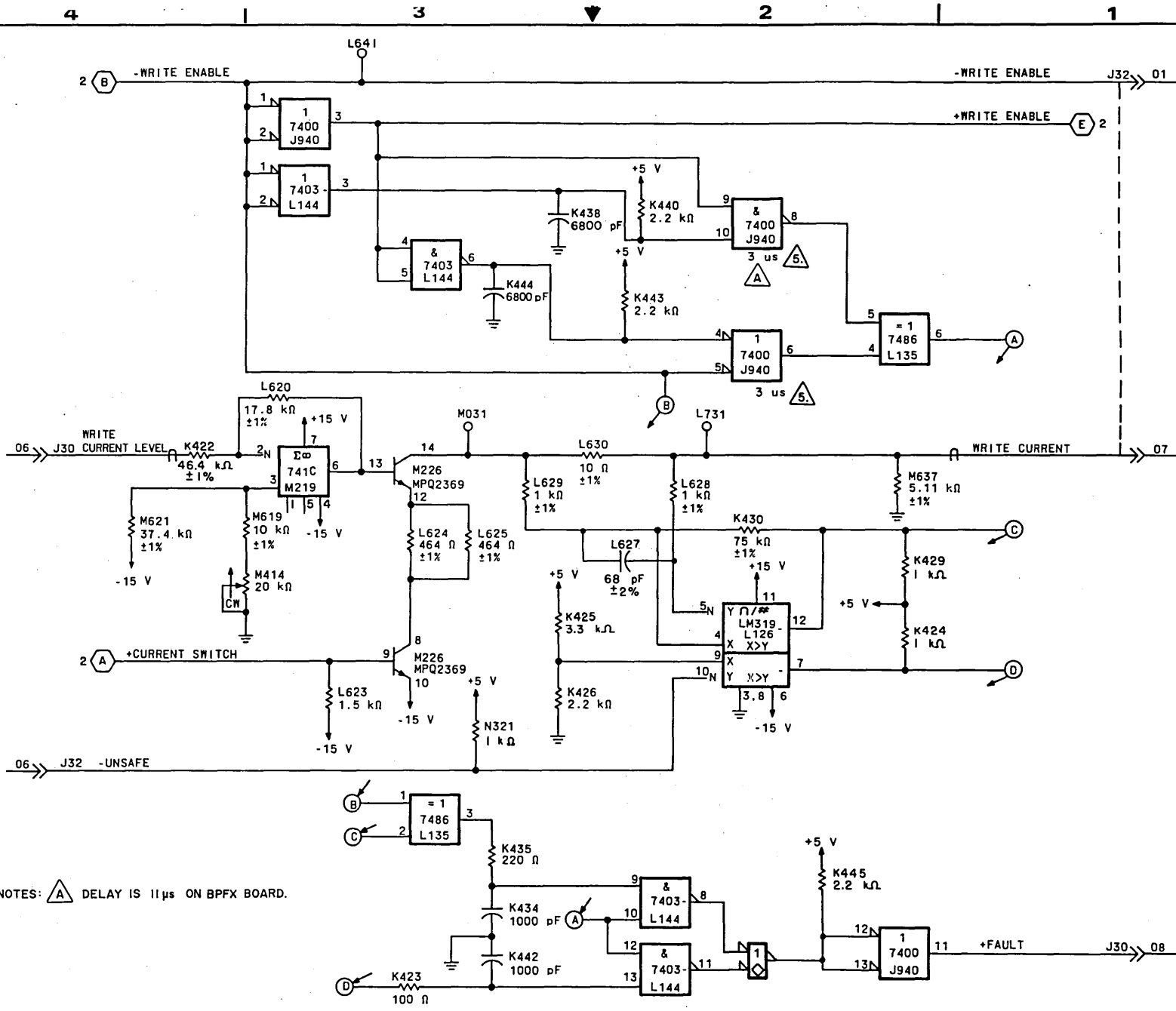


SIGNAL OUTPUTS

J32 >> 01 0902 P32-01
J32 >> 07 0902 P32-07
J30 >> 08 0704 J31-08

LOGIC CROSS REFERENCE INFORMATION

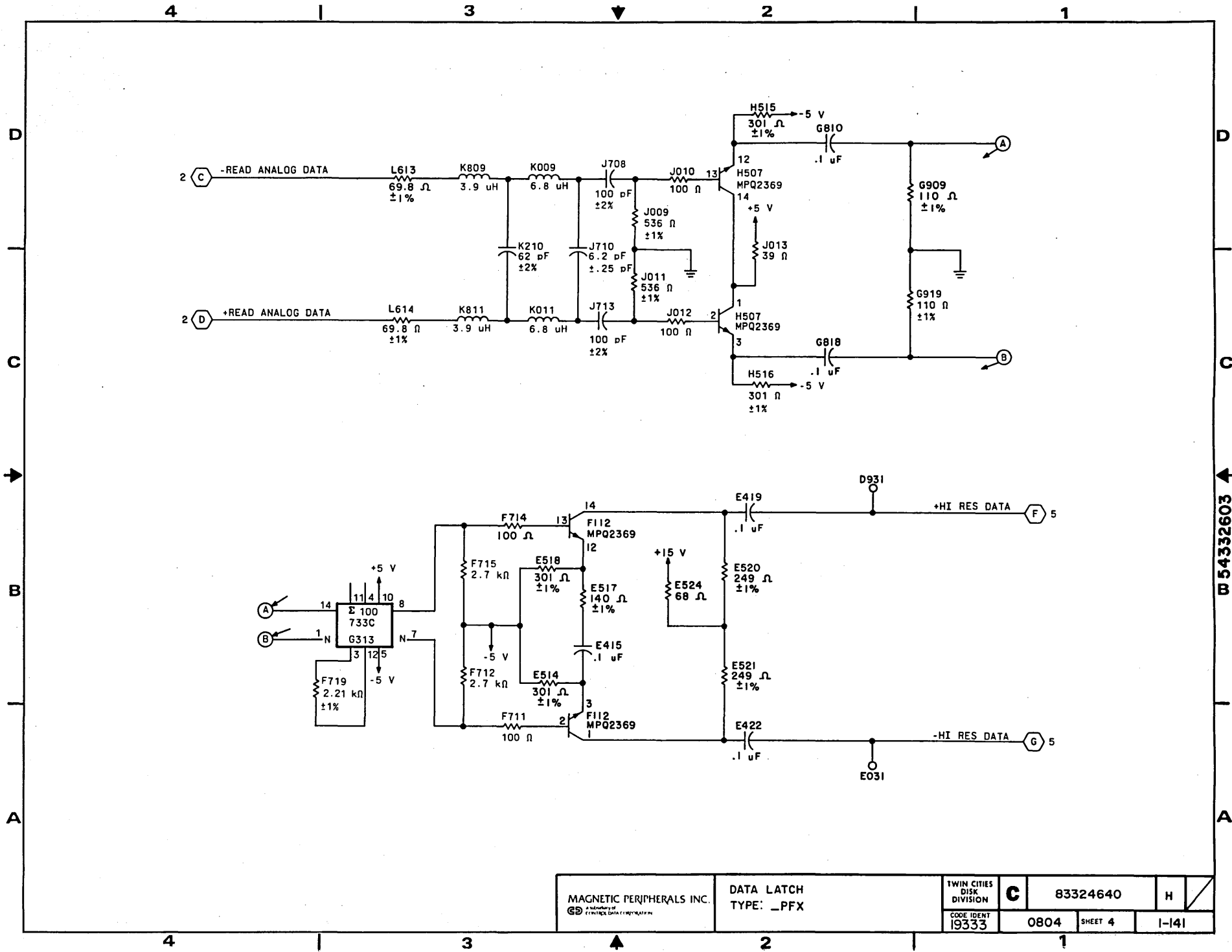
PUB	83324640	REV	B
CROSS REF NO	0803	PAGE	1-138



NOTES: \triangle DELAY IS 11 μ s ON BPF BOARD.

MAGNETIC PERIPHERALS INC. A MEMBER OF GE COMMERCIAL DATA CORPORATION	DATA LATCH TYPE: _PFX	TWIN CITIES DISK DIVISION	C	83324640	H
		CODE IDENT 19333	0603	SHEET 3	1-139

B54332603

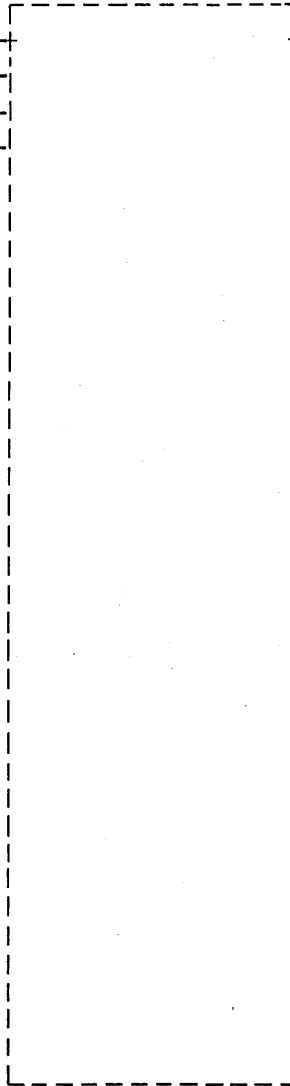


MAGNETIC PERIPHERALS INC. <small>Member of GE DATA SYSTEMS CORPORATION</small>	DATA LATCH TYPE: _PFX		TWIN CITIES DISK DIVISION	C	83324640	H
	CODE IDENT 19333	0804	SHEET 4	I-141		

B 54332603

SIGNAL INPUTS

0406 J29-26 ~~01~~ >> J30
0406 J29-24 ~~03~~ >> J30
0406 J29-22 ~~05~~ >> J30
0406 J29-20 ~~07~~ >> J30

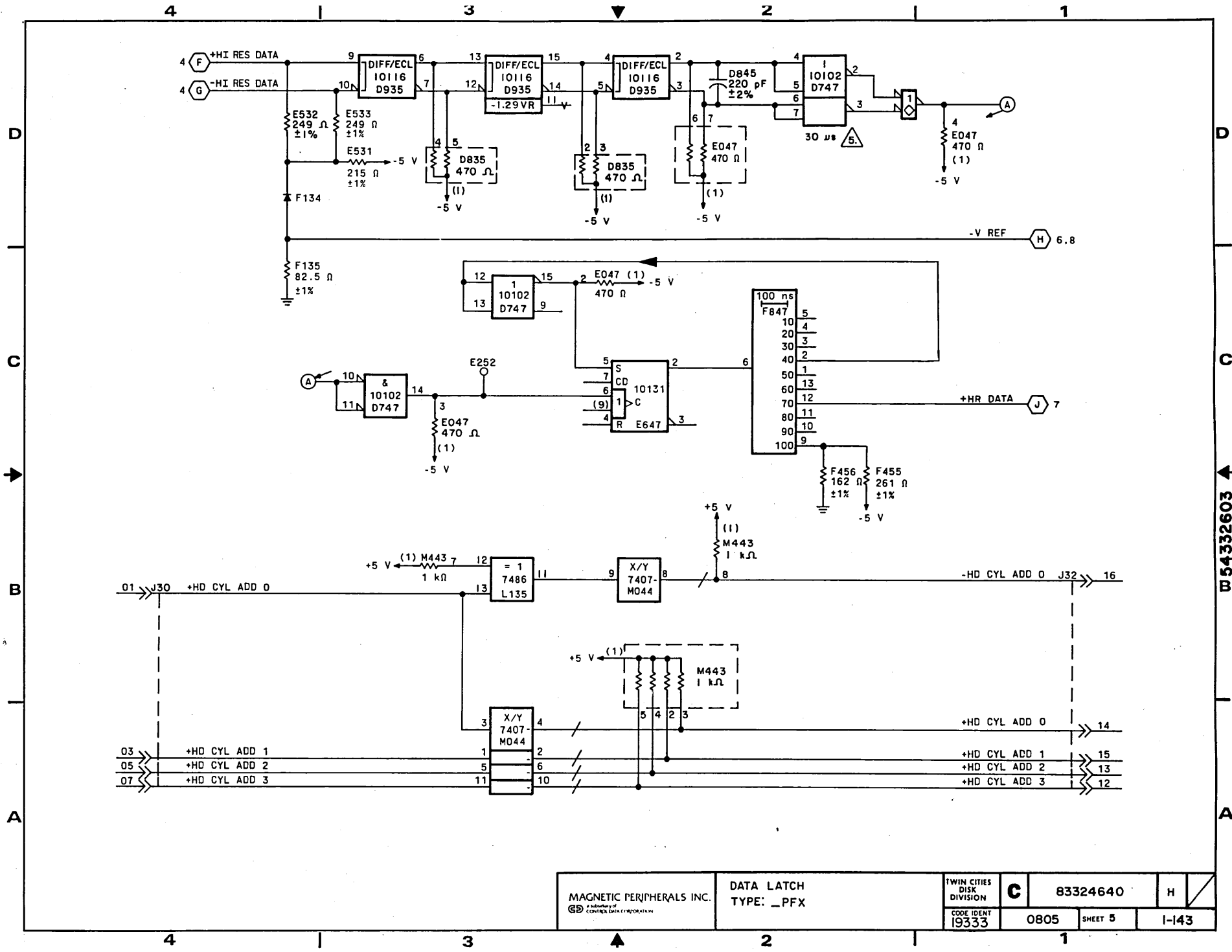


SIGNAL OUTPUTS

J32 >> ~~16~~ 0902 P32-16
J32 >> ~~14~~ 0902 P32-14
J32 >> ~~15~~ 0902 P32-15
J32 >> ~~13~~ 0902 P32-13
J32 >> ~~12~~ 0902 P32-12

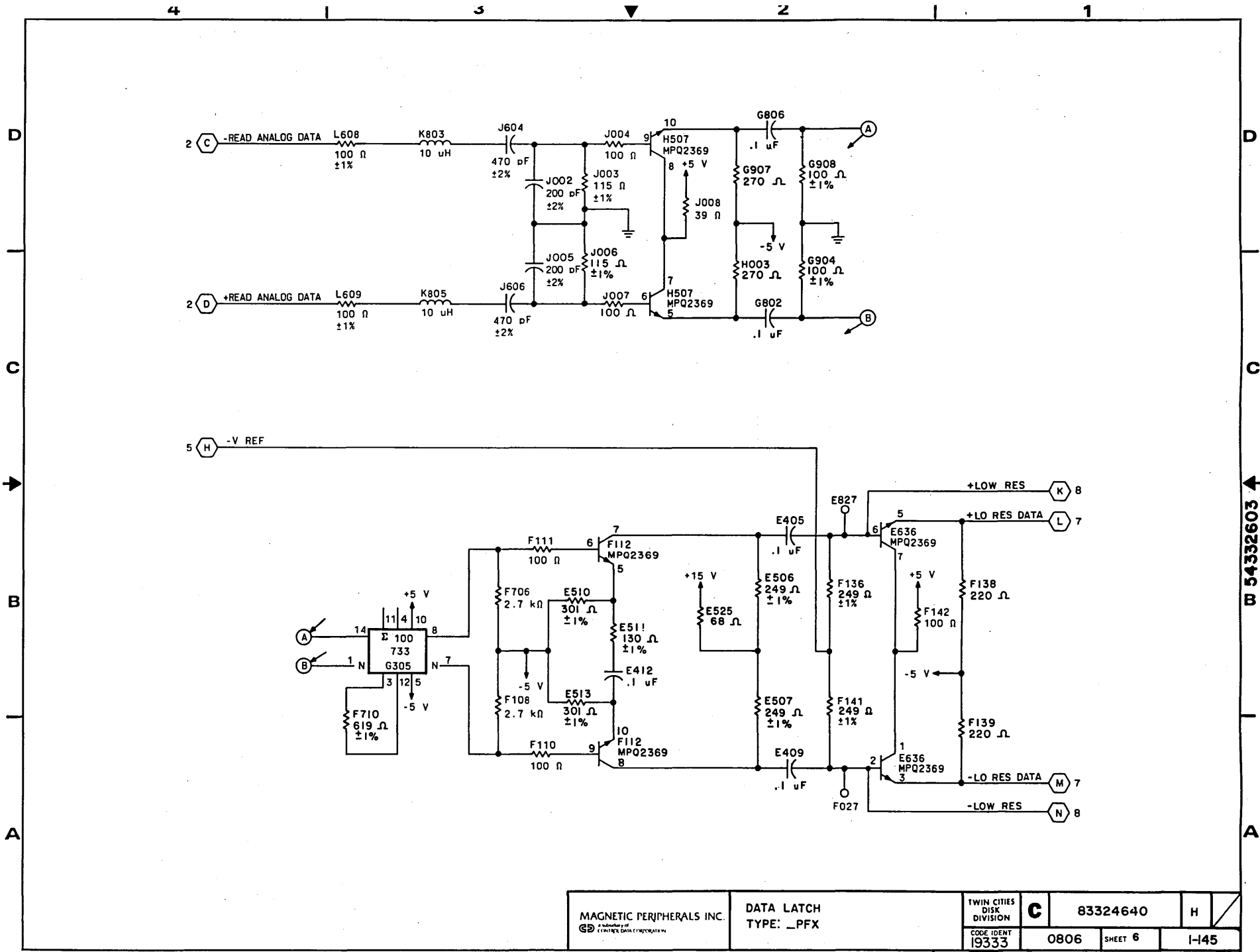
LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	B
CROSS REF NO	0805	PAGE	1-142



W 54332603

MAGNETIC PERIPHERALS INC. A Subsidiary of GE CONSUMER ELECTRONICS	DATA LATCH TYPE: _PFX	TWIN CITIES DISK DIVISION	C	83324640	H
		CODE IDENT 19333	0805	SHEET 5	I-143



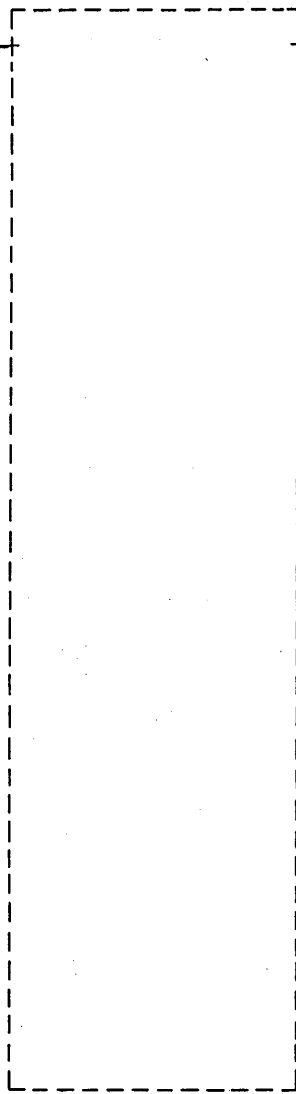
MAGNETIC PERIPHERALS INC. A subsidiary of GE CONTROL DATA CORPORATION	DATA LATCH TYPE: _PFX	TWIN CITIES DISK DIVISION	C	83324640	H
		CODE IDENT 19333	0806	SHEET 6	I-145

W 54332603

SIGNAL INPUTS

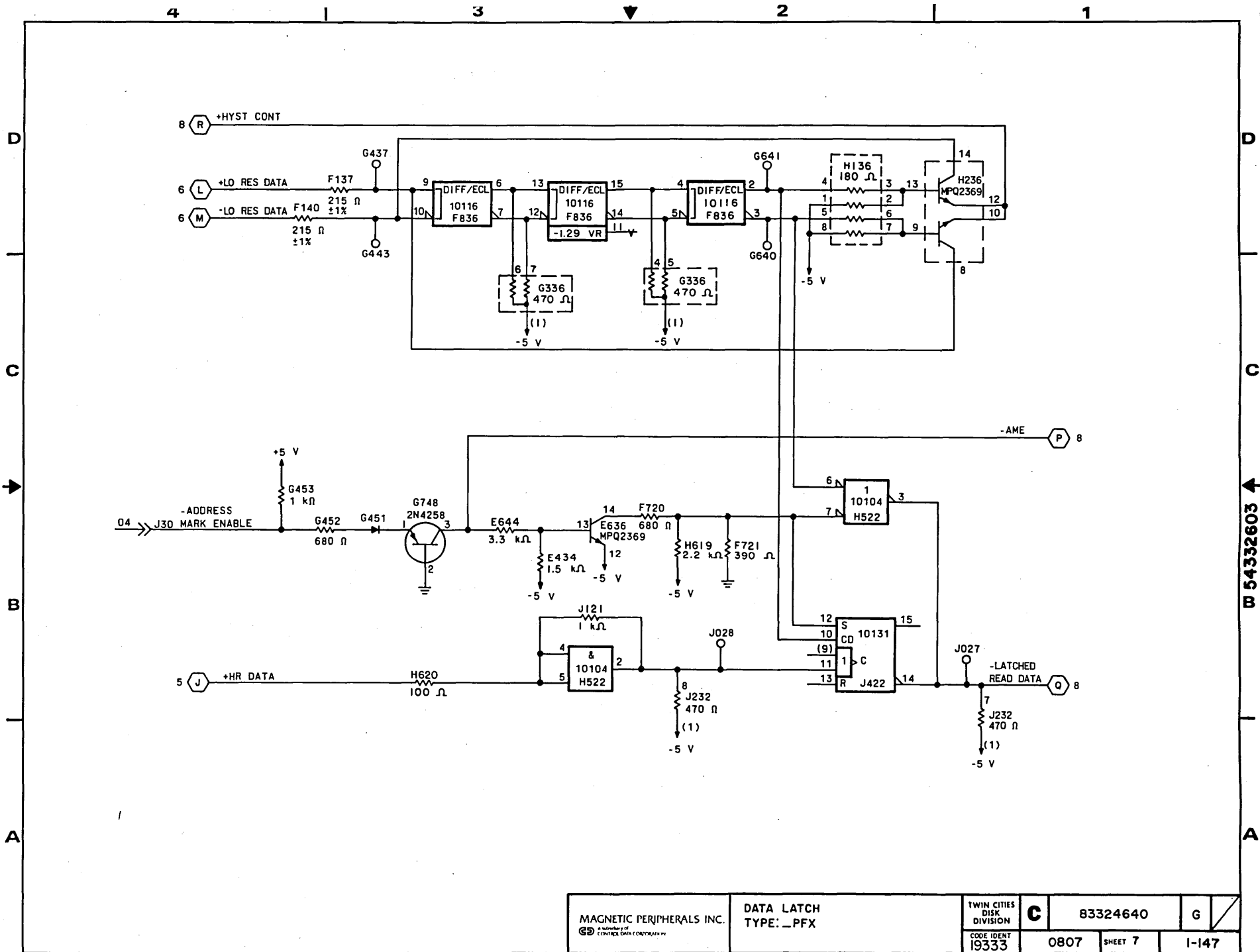
SIGNAL OUTPUTS

0704 J31-04 -04 ->> J30



LOGIC CROSS REFERENCE INFORMATION

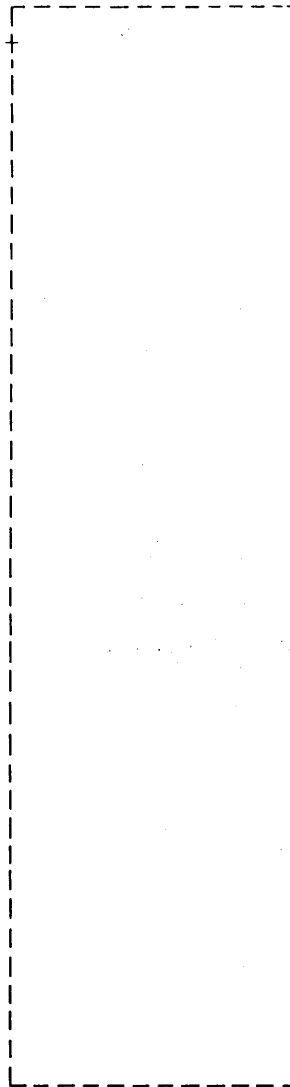
PUB	83324640	REV	B
CROSS REF NO	0807	PAGE	1-146



MAGNETIC PERIPHERALS INC. A Division of CONVERSE DATA CORPORATION	DATA LATCH TYPE: _PFX		TWIN CITIES DISK DIVISION	C	83324640	G
	CODE IDENT 19333	0807	SHEET 7			

SIGNAL INPUTS

SIGNAL OUTPUTS



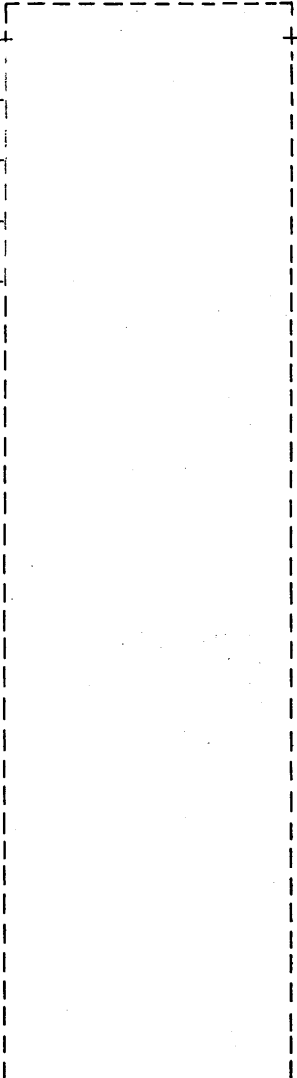
J30-->>21 0705 J31-21
J30-->>20 0705 J31-20

LOGIC CROSS REFERENCE INFORMATION

PUB		REV	
83324640		B	
CROSS REF NO	0808	PAGE	1-148

SIGNAL INPUTS

0801* J32-05 05 --> P32
0751* J32-05
0801* J32-02 02 --> P32
0751* J32-02
0801* J32-08 08 --> P32
0751* J32-08
0801* J32-11 11 --> P32
0751* J32-11
0801* J32-03 03 --> P32
0751* J32-03

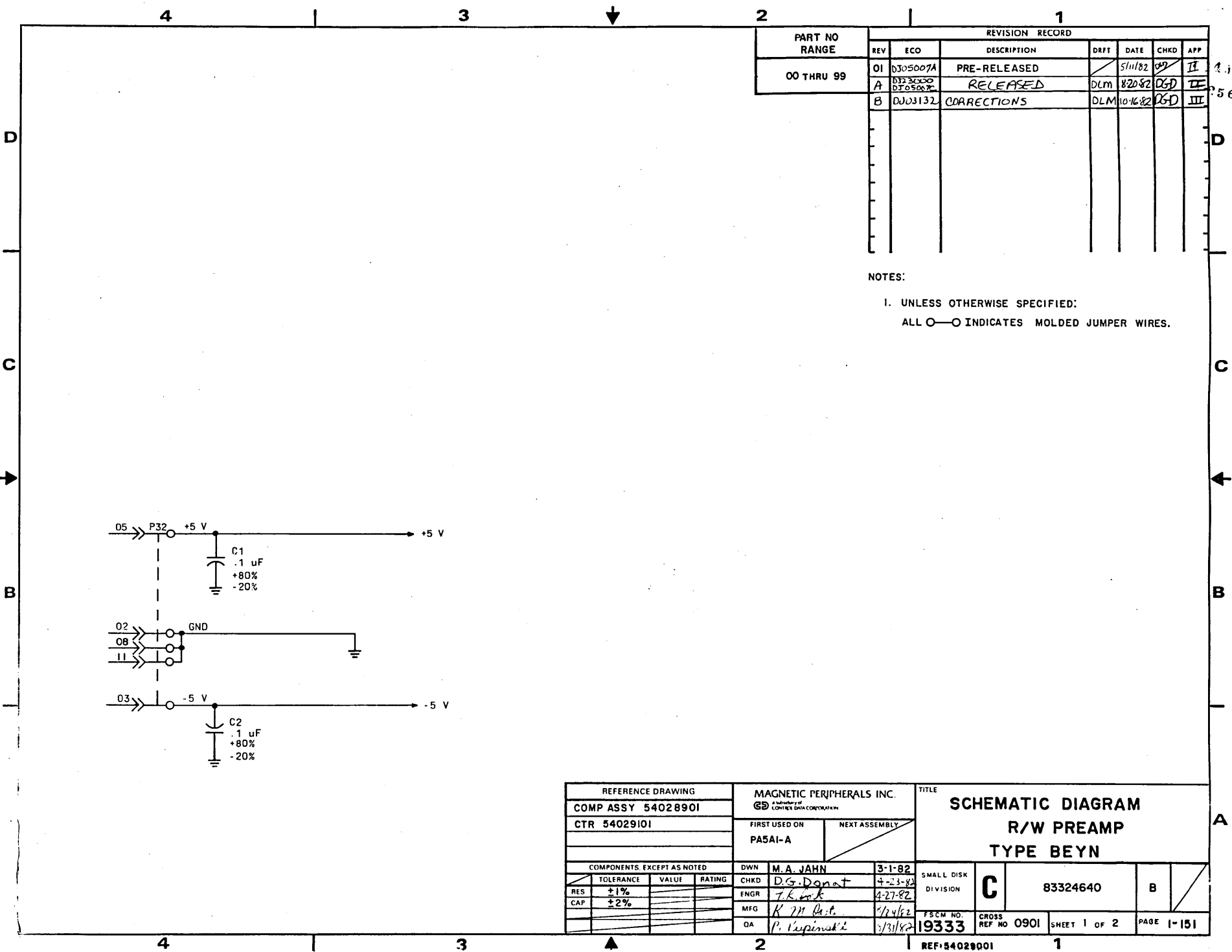


SIGNAL OUTPUTS

*070X and 08XX apply to drives with 2-board
read/write (PFX/PGX)
075X applies to drives with 1-board read/write
(RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0901	PAGE	1-150



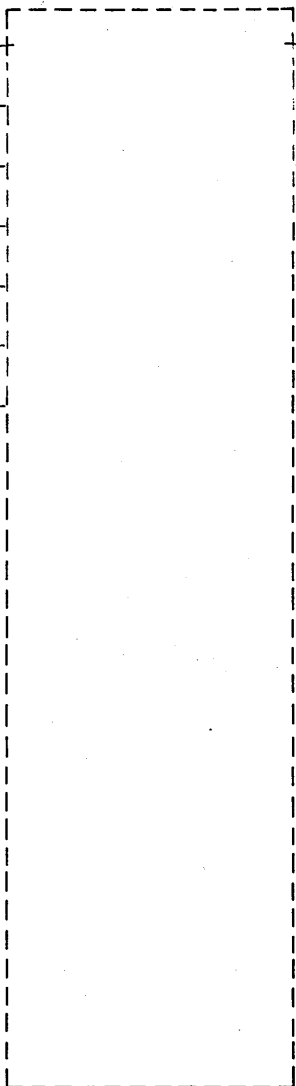
PART NO RANGE		REVISION RECORD						
		REV	ECO	DESCRIPTION	DRFT	DATE	CHKD	APP
00 THRU 99		01	DJ05007A	PRE-RELEASED		5/11/82	DG	II
		A	DJ05000 DJ05007	RELEASED	DLM	8/20/82	DGD	III
		B	DJ05132	CORRECTIONS	DLM	10/16/82	DGD	III

NOTES:
 1. UNLESS OTHERWISE SPECIFIED:
 ALL O—O INDICATES MOLDED JUMPER WIRES.

REFERENCE DRAWING			MAGNETIC PERIPHERALS INC.		TITLE				
COMP ASSY 54028901			GD A subsidiary of CONTECH DATA CORPORATION		SCHEMATIC DIAGRAM				
CTR 54029101			FIRST USED ON		R/W PREAMP				
			NEXT ASSEMBLY		TYPE BEYN				
			PASAI-A						
COMPONENTS, EXCEPT AS NOTED					DWN	M. A. JAHN	3-1-82	SMALL DISK	
TOLERANCE					CHKD	D.G. Donat	4-23-82	DIVISION	
VALUE					ENGR	T.K. [unclear]	4-27-82	C	
RATING					MFG	K. M. [unclear]	5/24/82	83324640	
RES	+1%				QA	P. Kupinski	3/31/82	B	
CAP	+2%						FSCM NO. 19333		
							CROSS REF NO 0901		
							SHEET 1 OF 2		
							PAGE 1-151		

SIGNAL INPUTS

0805* J32-12 -12 >> P32
 0756* J32-12
 0805* J32-13 -13 >> P32
 0756* J32-13
 0805* J32-15 -15 >> P32
 0756* J32-15
 0805* J32-14 -14 >> P32
 0756* J32-14
 0803* J32-01 -01 >> P32
 0754* J32-01
 0803* J32-07 -07 >> P32
 0756* J32-07
 0805* J32-16 -16 >> P32
 0756* J32-16



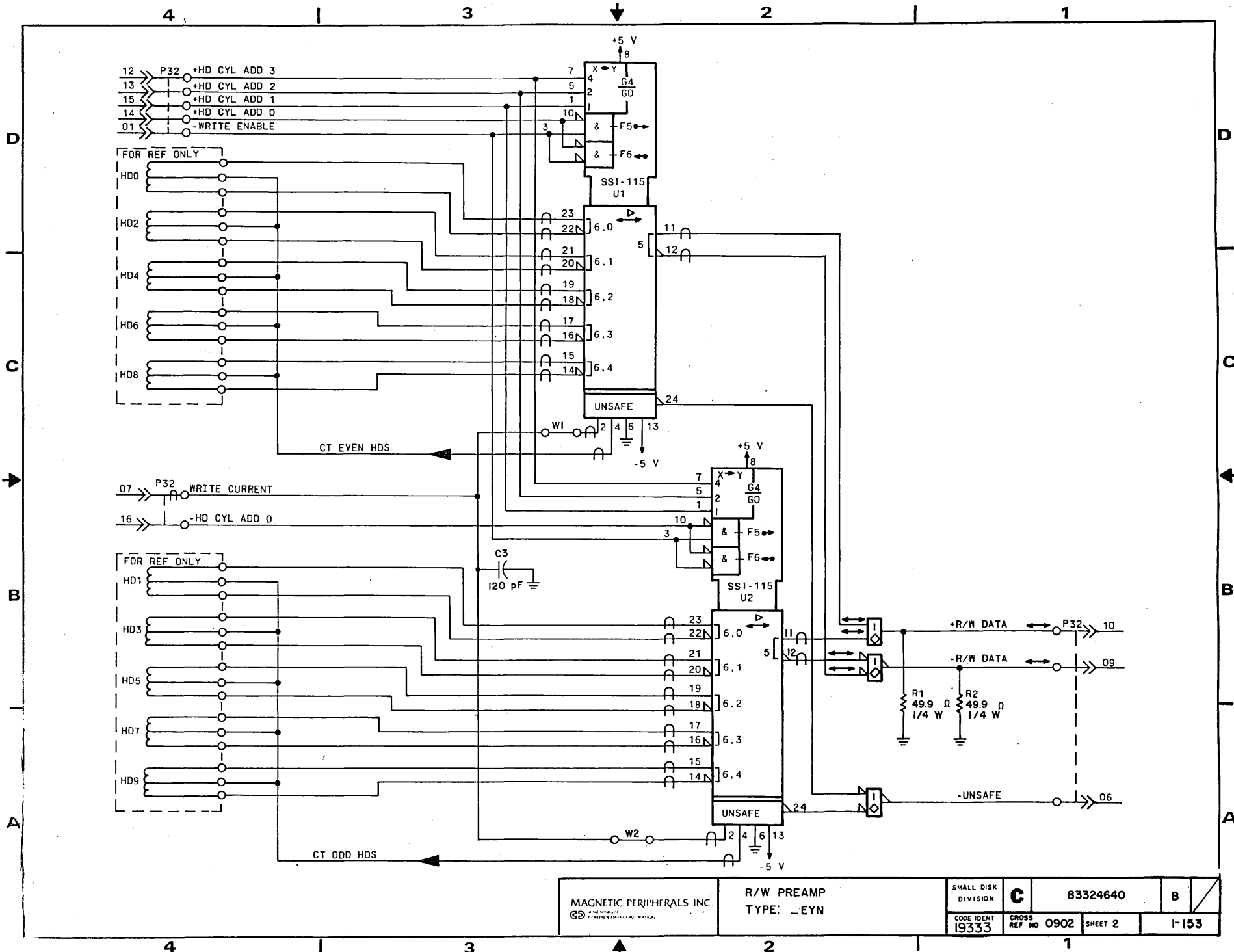
SIGNAL OUTPUTS

P32 >> 10 0802* J32-10
 0754* J32-10
 P32 >> 09 0802* J32-09
 0754* J32-09
 P32 >> 06 0803* J32-06
 0756* J32-06

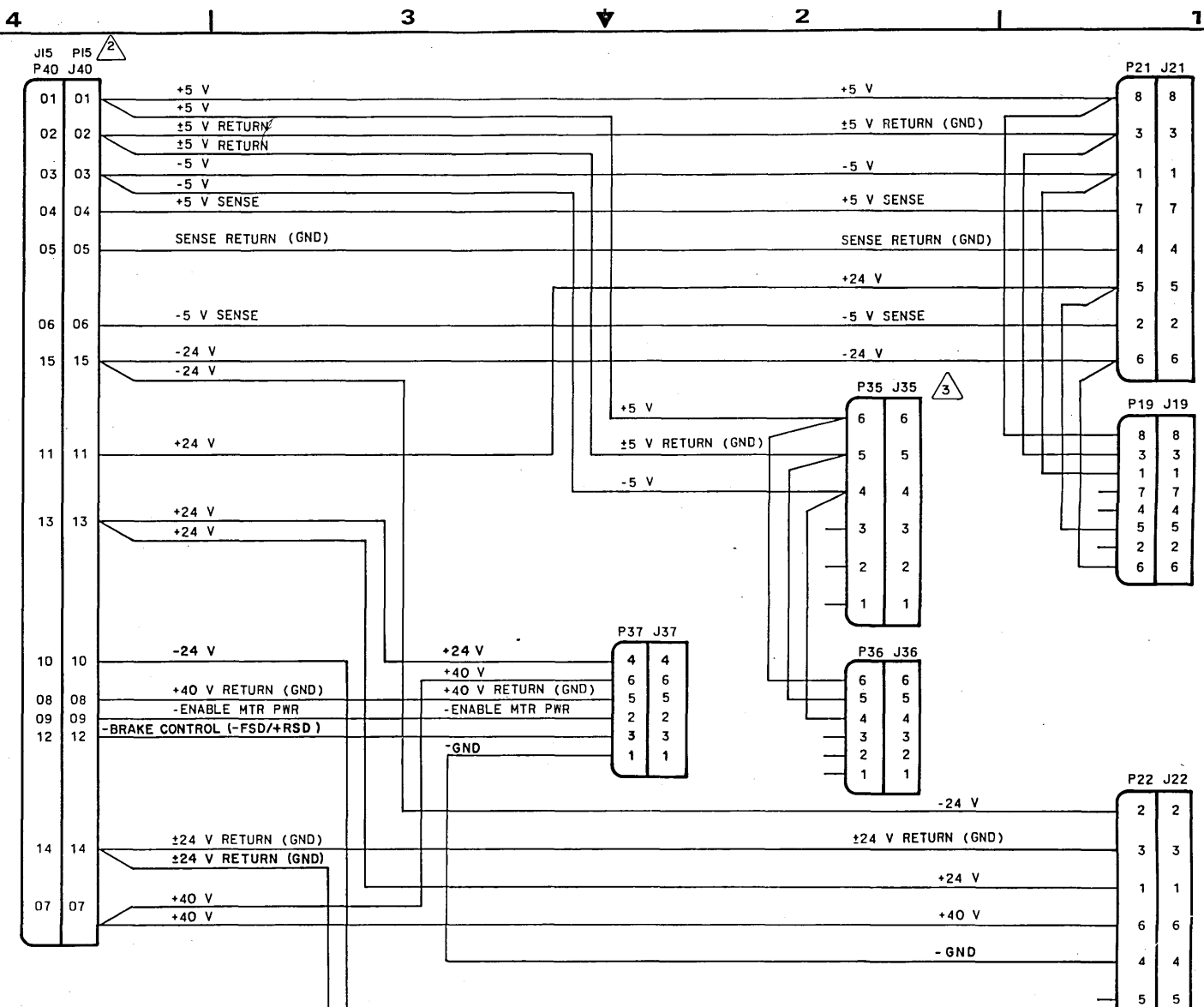
*070X and 08XX apply to drives with 2-board read/write (PFX/PGX)
 075X applies to drives with 1-board read/write (RUX)

LOGIC CROSS REFERENCE INFORMATION

PUB	83324640	REV	H
CROSS REF NO	0902	PAGE	1-152



MAGNETIC PERIPHERALS INC. <small>A DIVISION OF GENERAL INSTRUMENTS COMPANY</small>	R/W PREAMP		SMALL DISK DIVISION	C	83324640	B
	TYPE: _EYN		CODE IDENT 19333	CROSS REF NO 0902	SHEET 2	I-153



NOTE:

- ① P38 IS ON EARLY MODEL UNITS ONLY.
- ② P40/J40 ON UNITS WITH REMOTE POWER SUPPLY; J15/P15 ON UNITS WITH INTEGRAL POWER SUPPLY.
- ③ CONNECTOR J35/P35 IS USED ON DRIVES WITH 2-BOARD READ/WRITE (PFX/PGX) ONLY.

MAGNETIC PERIPHERALS INC. <small>MEMBER OF G.D. GENERAL DATA CORPORATION</small>	CABLING DIAGRAM DC HARNESS		SMALL DISK DIVISION	C	83324640	H	/
	CODE IDENT 19333	CROSS REF NO 1002	SHEET 2	1-154			

4

3

2

1

D

D

C

C

B

B

A

A

J14 P14			SINGLE CHANNEL		DUAL CHANNEL	
			P20	J20	P20	J20
20	20	+SECTOR	01	01	40	40
21	21	-DC MASTER CLEAR	02	02	39	39
19	19	+ON CYLINDER	03	03	38	38
22	22	+SELECT COMPARE	04	04	37	37
18	18	-OPEN CABLE DETECT	05	05	36	36
23	23	+SEEK ERROR	06	06	35	35
17	17	+UNIT SELECT TAG	07	07	34	34
24	24	+WRITE PROTECTED	08	08	33	33
16	16	+SEEK END	09	09	32	32
25	25	-FAULT	10	10	31	31
15	15	+UNIT SELECT BIT 3	11	11	30	30
26	26	+WRITE GATE	12	12	29	29
14	14	+UNIT SELECT BIT 2	13	13	28	28
27	27		14	14	27	27
13	13	+UNIT SELECT BIT 1	15	15	26	26
28	28		16	16	25	25
12	12	-READY	17	17	24	24
29	29	-VOLTAGE FAULT	18	18	23	23
11	11	+UNIT SELECT BIT 0	19	19	22	22
30	30	+(HOLD + LOCAL)	20	20	21	21
10	10	-UNIT SELECTED	21	21	20	20
31	31	-GND	22	22	19	19
09	09	-I/O CONTROL 1	23	23	18	18
32	32	+UNIT SEL SWITCH 2	24	24	17	17
08	08	-I/O CONTROL 2	25	25	16	16
33	33	+SEEK INTERRUPT	26	26	15	15
07	07	+UNIT SEL SWITCH 1	27	27	14	14
34	34	-I/O CONTROL 3	28	28	13	13
06	06	+UNIT SEL SWITCH 0	29	29	12	12
35	35	+INDEX	30	30	11	11
05	05	+HEAD/CYL ADDRESS 0	31	31	10	10
36	36		32	32	09	09
04	04	+HEAD/CYL ADDRESS 1	33	33	08	08
37	37		34	34	07	07
03	03	+HEAD/CYL ADDRESS 2	35	35	06	06
38	38		36	36	05	05
02	02	+HEAD/CYL ADDRESS 3	37	37	04	04
39	39	-FWD OFFSET	38	38	03	03
01	01	-RTZ	39	39	02	02
40	40	-REV OFFSET	40	40	01	01

MAGNETIC PERIPHERALS INC
MEMPHIS, TENNESSEE

CABLING DIAGRAM
 CONTROL BOARD
 TO I/O BOARD

SMALL DISK
 DIVISION

C

83324640

B

CODE IDENT
 19333

CROSS
 REF NO 1012

SHEET 2

1-155

REF: R120126

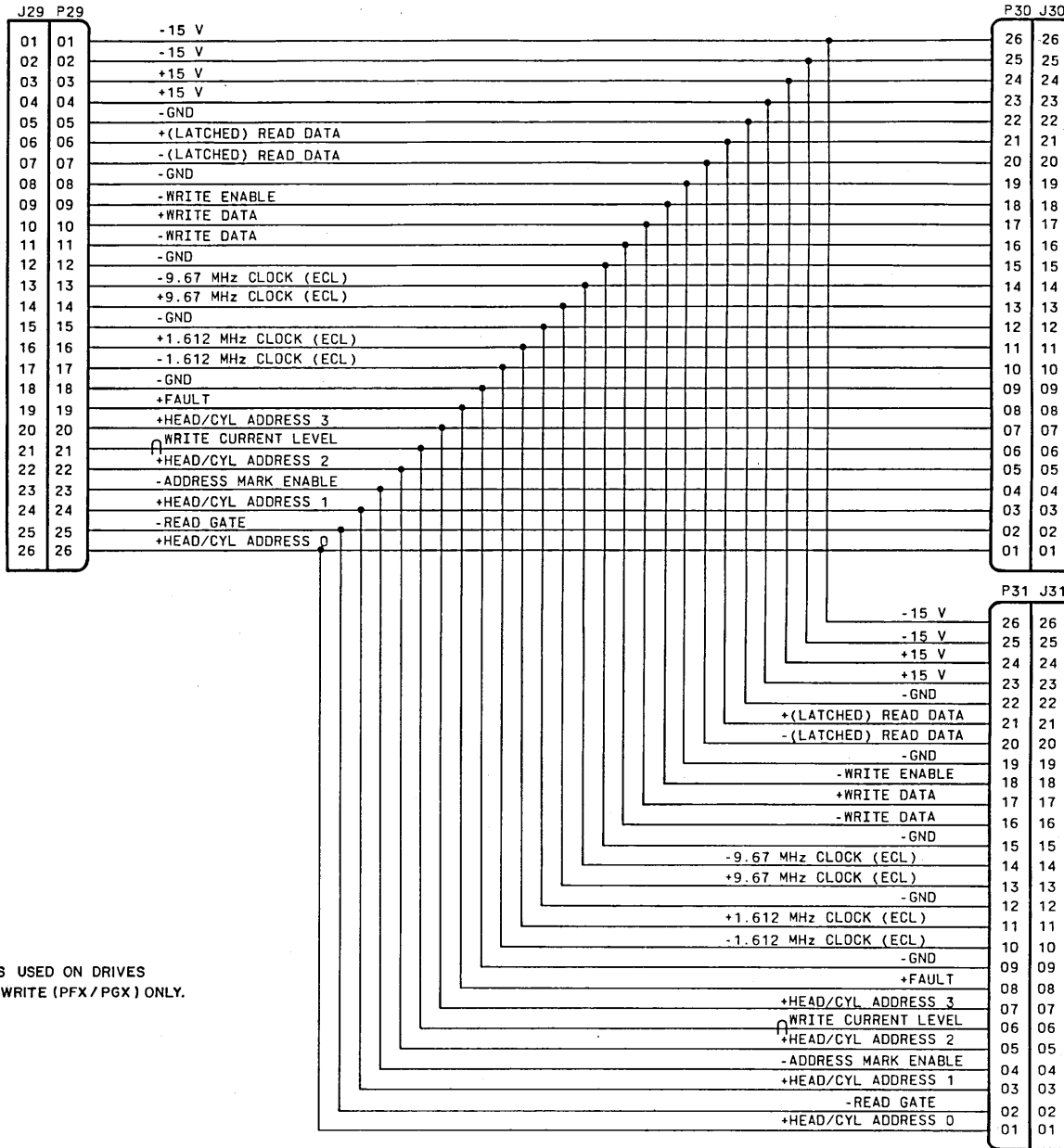
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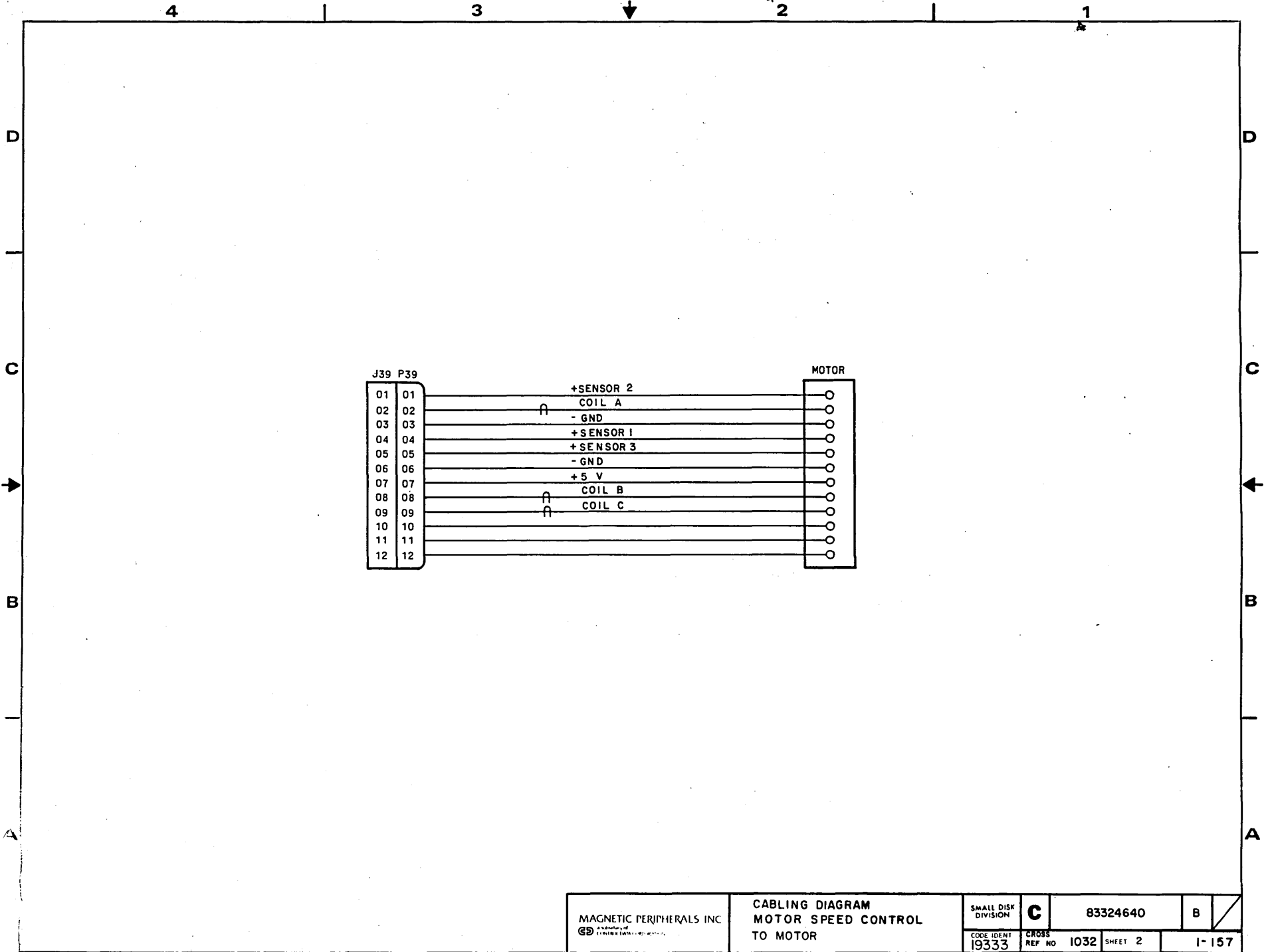


NOTES:



CONNECTOR J31/P31 IS USED ON DRIVES WITH 2-BOARD READ/WRITE (PFX/PGX) ONLY.

MAGNETIC PERIPHERALS INC. GPO	CABLING DIAGRAM CONTROL BOARD TO DATA LATCH AND R/W PLO'S	SMALL DISK DIVISION	C	83324640	H
		CODE IDENT 19333	CROSS REF NO 1022	SHEET 2	I-156



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V

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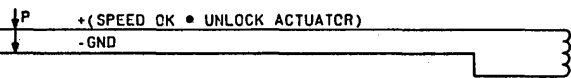
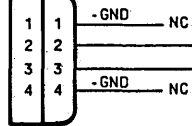
B

B

A

A

J25 P25



CARRIAGE UNLOCKED SOLENOID

MAGNETIC PERIPHERALS INC. A DIVISION OF GD GENERAL DYNAMICS CORPORATION	CABLING DIAGRAM INTERLOCKS		C	83324640	B	
	COIL IDENT 19333	CROSS REF NO 1042	SHEET 2	1-158		

4

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1

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