

DS2155 and **DS26502** Software Comparison

This application note discusses the differences between the DS2155 T1/E1/J1 Single Chip Transceiver and the DS26502 T1/E1/J1/64KCC Bits Element register maps.

The DS26502 is a T1/E1/J1/64kHz Composite Clock Bits Element that also functions as a reduced-feature-set SCT. As it was loosely based on the DS2155 SCT, the memory map and register set have many similarities to the DS2155, making it fairly easy to migrate existing DS2155 software drivers to the DS26502. However some changes will be necessary because of added features, removed features and general changes to the memory map and register set.

Introduction

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This application note discusses the differences between the DS2155 T1/E1/J1 Single Chip Transceiver and the DS26502 T1/E1/J1/64KCC Bits Element register maps. The DS26502 is a T1/E1/J1/64kHz Composite Clock Bits Element that also functions as a reduced -feature-set SCT. As it was loosely based on the DS2155 SCT, the memory map and register set have many similarities to the DS2155, making it fairly easy to migrate existing DS2155 software drivers to the DS26502. However some changes will be necessary because of added features, removed features, and general changes to the memory map and register set.

Please consult the latest datasheets for detailed register locations and bit descriptions.

Direct Register Mapping

The following registers may be directly mapped from the DS2155 to the DS26502. The bit locations and functionality for each of these registers has not changed.

Table 1 Direct Register Mapping

DS26	DS26502		155	DS26502 Bogistor Docorintion
Address	Name	Address	Name	DS26502 Register Description
03	T1RCR1	03	T1RCR1	T1 Receive Control Register 1
1F	BOCC	37	BOCC	BOC Control Register

30	LIC1	78	LIC1	Line Interface Control Register 1
40	TAF	D0	TAF	Transmit Align Frame Register
41	TNAF	D1	TNAF	Transmit Nonalign Frame Register
42	TsiAF	D2	TsiAF	Transmit Si Align Frame
43	TSINAF	D3	TSINAF	Transmit Si Nonalign Frame
44	TRA	D4	TRA	Transmit Remote Alarm Bits
45	TSa4	D5	TSa4	Transmit Sa4 Bits
46	TSa5	D6	TSa5	Transmit Sa5 Bits
47	TSa6	D7	TSa6	Transmit Sa6 Bits
48	TSa7	D8	TSa7	Transmit Sa7 Bits
49	TSa8	D9	TSa8	Transmit Sa8 Bits
4A	TSACR	DA	TSACR	Transmit Sa Bit Control Register
50	RFDL	C0	RFDL	Receive FDL Register
51	TFDL	C1	TFDL	Transmit FDL Register
52	RFDLM1	C2	RFDLM1	Receive Facility Data Link Match Register 1
53	RFDLM2	C3	RFDLM2	Receive Facility Data Link Match Register 2
56	RAF	C6	RAF	Receive Align Frame Register
57	RNAF	C7	RNAF	Receive Nonalign Frame Register
58	RSiAF	C8	RSiAF	Receive Si Align Frame
59	RSiNAF	C9	RSiNAF	Receive Si Nonalign Frame
5A	RRA	CA	RRA	Receive Remote Alarm Bits
5B	RSa4	СВ	RSa4	Receive Sa4 Bits
5C	RSa5	CC	RSa5	Receive Sa5 Bits
5D	RSa6	CD	RSa6	Receive Sa6 Bits
5E	RSa7	CE	RSa7	Receive Sa7 Bits
5F	RSa8	CF	RSa8	Receive Sa8 Bits
F0	TEST1	F0	TEST1	Test Register 1 - For Factory Use Only
F1	TEST2	F1	TEST2	Test Register 2- For Factory Use Only
F2	TEST3	F2	TEST3	Test Register 3 - For Factory Use Only
F3	TEST4	F3	TEST4	Test Register 4 - For Factory Use Only
F4	TEST5	F4	TEST5	Test Register 5 - For Factory Use Only
F5	TEST6	F5	TEST6	Test Register 6 - For Factory Use Only
F6	TEST7	F6	TEST7	Test Register 7 - For Factory Use Only
F7	TEST8	F7	TEST8	Test Register 8 - For Factory Use Only

F8	TEST9	F8	TEST9	Test Register 9 - For Factory Use Only
F9	TEST10	F9	TEST10	Test Register 10 - For Factory Use Only
FA	TEST11	FA	TEST11	Test Register 11 - For Factory Use Only
FB	TEST12	FB	TEST12	Test Register 12 - For Factory Use Only
FC	TEST13	FC	TEST13	Test Register 13 - For Factory Use Only
FD	TEST14	FD	TEST14	Test Register 14 - For Factory Use Only
FE	TEST15	FE	TEST15	Test Register 15 - For Factory Use Only
FF	TEST16	FF	TEST16	Test Register 16 - For Factory Use Only

Modified Registers

The following registers exist in the DS2155 and the DS26502. However, register addresses, bit names, functionality or location may have changed. The following table shows the register contents for each register that had changes. Please refer to the DS26502 datasheet for a complete register and bit description. The most recent DS26502 datasheet can be found at www.maxim-ic.com.

Table 2 Modified Registers Table 1. Caption

Address	Rit	DS26502	DS2155	DS26502 Pagistor Description
Address	DIL	TSTRREG	MSTRREG	DS26502 Register Description
	0	SFTRST	SFTRST	
	1	-	T1/E1	
	2	-	TEST0	
00	3	-	TEST1	Test Beest Beginter
00	4	TEST0	-	Test Reset Register
	5	TEST1	-	
	6	-	-	
	7	-	-	
Address	Dit	DS26502	DS2155	DS26502 Register Description
Addiess	DIL	IOCR1	IOCR1	D320302 Register Description
	0	ODF	ODF	
	1	TSIO	TSIO	
	2	TSM	TSM	
01	3	CSM_TSDW	TSDW	I/O Configuration Register 1
O I	4	RLOFF	RSIO	I/O Configuration Register 1
	5	RSMS1	RSMS1	

	6	RSMS2	RSMS2	
	7	G703TE	RSMS	
Address	Di+	DS26502	DS2155	DS26502 Pagistar Description
Address	DIL	IOCR2	IOCR2	DS26502 Register Description
	0	RPCOE	RSCLKM	
	1	TPCOE	TSCLKM	
	2	-	H100EN	
02	3	-	TSSYNCINV	I/O Configuration Register 2
02	4	TS_8K_4INV	TSYNCINV	I/O Coringulation Register 2
	5	RS_8KINV	RSYNCINV	
	6	TCLKINV	TCLKINV	
Address I	7	RCLKINV	RCLKINV	
	Dit	DS26502	DS2155	DS26502 Bogistor Description
Audiess	DIL	T1RCR2	T1RCR2	DS26502 Register Description
	0	RD4YM	RD4YM	
	1	RJC	RJC	
	2	-	RZBTSI	
04	3	-	RZSE	T1 Pagaina Control Pagister 2
04	4	-	RSLC96	T1 Receive Control Register 2
	5	RB8ZS	RB8ZS	
	6	-	RFM	
	7	-	-	
Address	Rit	DS26502	DS2155	DS26502 Register Description
Addiess	Dit	T1TCR1	T1TCR1	Dozubuz Kegistel Description
	0	TYEL	TYEL	
	1	-	TBL	
	2	-	TFDLS	
05	3	-	GB7S	T1 Transmit Control Register 1
03	4	-	TSSE	11 Transmit Control Negister 1
	5	TCPT	TCPT	
	6	TFPT	TFPT	
	7	TJC	TJC	
Address	Bit	DS26502	DS2155	DS26502 Register Description

		T1TCR2	T1TCR2		
	0	TB7ZS	TB7ZS		
	1	-	TZBTSI		
	2	TD4YM	TD4YM		
06	3	FBCT1	FBCT1	T1 Transmit Control Register 2	
06	4	FBCT2	FBCT2	11 Transmit Control Register 2	
	5	-	TZSE		
	6	TFSE	TSLC96		
	7	TB8ZS	TB8ZS		
Address	Di4	DS26502	DS2155	DS26502 Register Description	
Address	Ы	T1CCR	T1CCR	Dozoboz Register Description	
	0	-	TLOOP		
	1	PDE	PDE		
	2	-	TFM		
07	3	TAIS-CI	TAIS-CI	T1 Common Control Register	
01	4	TRAI-CI	TRAI-CI	1 1 Common Control Register	
	5	-	-		
	6	-	-		
	7	-	-		
Address	Bit	DS26502	DS2155	DS26502 Register Description	
, taa. 000		IDR	IDR	Decoration Decomposition	
	0	N	N		
	1	N	N	Device Identification Register - The	
	2	N	N	lower four bits will display the die revision.	
10	3	N	N		
1F	4	0	0	Note: The first address shown is the register location in the DS26502. The	
	5	0	0	second is the register location from the	
	6	0	1	DS2155.	
	7	0	1		
Address	Bit	DS26502	DS2155	DS26502 Register Description	
		INFO1	INFO1		
	0	RL0	FBE		
	1	RL1	B8ZS	Information Register 1	
				inionnation regiotor i	

11 10	2 3 4 5 6 7	RL2 RL3 - - -	SEFE 16ZD 8ZD COFA TPDV RPDV	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155.
Address	Bit	DS26502 INFO2	DS2155 INFO2	DS26502 Register Description
	0	CASRC	RL0	
	1	FASRC	RL1	Information Register 2
	2	CRCRC	RL2	-
12	3	-	RL3	Note: The first address shown is the register location in the DS26502. The
11	4	-	TOCD	second is the register location from the
	5	-	TCLE	DS2155. The DS26502 INFO2 register
	6	-	BD	is identical to the DS2155 INFO3 register located at Address 12h.
	7	-	BSYNC	register resulted at 7 tagrees 12m
	D:4	DS26502	DS2155	DOGGEGG D D
Address	Bit	IIR	IIR1	DS26502 Register Description
		1111	IIIXI	
	0	SR1	SR1	
	0			
		SR1	SR1	Interrupt Information Register
13	1	SR1 SR2	SR1 SR2	Note: The first address shown is the
13 14	1 2	SR1 SR2 SR3	SR1 SR2 SR3	Note: The first address shown is the register location in the DS26502. The
	1 2 3	SR1 SR2 SR3	SR1 SR2 SR3 SR4	Note: The first address shown is the
	1 2 3 4	SR1 SR2 SR3	SR1 SR2 SR3 SR4 SR5	Note: The first address shown is the register location in the DS26502. The second is the register location from the
	1 2 3 4 5	SR1 SR2 SR3 SR4 - -	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8	Note: The first address shown is the register location in the DS26502. The second is the register location from the
14	1 2 3 4 5 6 7	SR1 SR2 SR3 SR4 DS26502	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155.
	1 2 3 4 5 6 7	SR1 SR2 SR3 SR4 	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155 SR1	Note: The first address shown is the register location in the DS26502. The second is the register location from the
14	1 2 3 4 5 6 7 Bit	SR1 SR2 SR3 SR4 SR3 SR4	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155 SR1 LOLITC	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155.
14	1 2 3 4 5 6 7 Bit	SR1 SR2 SR3 SR4 TOCD	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155 SR1 LOLITC TOCD	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155. DS26502 Register Description
14	1 2 3 4 5 6 7 Bit 0 1 2	SR1 SR2 SR3 SR4 SR3 SR4	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155 SR1 LOLITC TOCD TCLE	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155. DS26502 Register Description Status Register 1
Address	1 2 3 4 5 6 7 Bit 0 1 2 3	SR1 SR2 SR3 SR4 TOCD TCLE -	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155 SR1 LOLITC TOCD TCLE LRCL	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155. DS26502 Register Description Status Register 1 Note: The first address shown is the
14 Address	1 2 3 4 5 6 7 Bit 0 1 2	SR1 SR2 SR3 SR4 TOCD	SR1 SR2 SR3 SR4 SR5 SR6 SR7 SR8 DS2155 SR1 LOLITC TOCD TCLE	Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155. DS26502 Register Description Status Register 1

	5	-	RSCOS	DS2155.
	6	-	TIMER	
	7	-	ILUT	
Address	Di4	DS26502	DS2155	DS26502 Pagistar Description
Audiess	DIL	IMR1	IMR1	DS26502 Register Description
	0	-	LOLITC	
	1	TOCD	TOCD	
	2	TCLE	TCLE	Interrupt Mask Register 1
15	3	-	LRCL	Note: The first address shown is the
17	4	JALT	JALT	register location in the DS26502. The
	5	-	RSCOS	second is the register location from the DS2155.
	6	-	TIMER	002100.
	7	-	ILUT	
Address	D:4	DS26502	DS2155	DCCCCCC Descioles Description
Address	Bit	SR2	SR2	DS26502 Register Description
	0	RLOF	RLOS	
	1	RLOS	FRCL	
	2	RAIS	RUA1	Status Register 2
16	3	RYEL	RYEL	Note: The first address shown is the
18	4	RLOFC	RLOSC	register location in the DS26502. The
	5	RLOSC	FRCLC	second is the register location from the DS2155.
	6	RAISC	RUA1C	DOZ 100.
	7	RYELC	RYELC	
A ddraca	D:4	DS26502	DS2155	DC26502 Bagister Description
Address	Bit	IMR2	IMR2	DS26502 Register Description
	0	RLOF	RLOS	
	1	RLOS	FRCL	
	2	RAIS	RUA1	Interrupt Mask Register 2
17	3	RYEL	RYEL	Note: The first address shown is the
19	4	RLOFC	RLOSC	register location in the DS26502. The
	5	RLOSC	FRCLC	second is the register location from the DS2155.
	6	RAISC	RUA1C	DOZ 100.
	7	RYELC	RYELC	

Address	Rit	DS26502	DS2155	DS26502 Register Description
Addiess		SR3	SR3	Dozubuz Kegistei Description
	0	RBOC	RRA	
	1	RMTCH	RDMA	
	2	TFDLE	V52LNK	Status Register 3
18	3	RFDLF	LORC	Note: The first address shown is the
	4	RFDLAD	LOTC	register location in the DS26502. The
	5	BOCC	LUP	second is the register location from the DS2155.
	6	LOTC	LDN	
	7	-	LSPARE	
Addross	Di4	DS26502	DS2155	DS26502 Register Description
Address		IMR3	IMR3	Dozoboz Register Description
	0	RBOC	RRA	
	1	RMTCH	RDMA	Leterer of March Devilation 0
	2	TFDLE	V52LNK	Interrupt Mask Register 3
19	3	RFDLF	LORC	Note: The first address shown is the
1B	4	RFDLAD	LOTC	register location in the DS26502. The
	5	BOCC	LUP	second is the register location from the DS2155.
	6	LOTC	LDN	
	7	-	LSPARE	
Address	Dit	DS26502	DS2155	DS26502 Register Description
Addiess		SR4	SR4	Dozoboz Kegister Description
	0	RAF	RAF	
	1	RCMF	RCMF	Otat a Davida A
	2	RMF	RMF	Status Register 4
1A	3	TAF	TAF	Note: The first address shown is the
1C	4	TMF	TMF	register location in the DS26502. The
	5	RSA0	RSAZ	second is the register location from the DS2155.
	6	RSA1	RSAO	2 3 2 1 3 3 1
	7	RAIS-CI	RAIS-CI	
Address	Rit	DS26502	DS2155	DS26502 Pagistor Description
Address	וום	IMR4	IMR4	DS26502 Register Description
	0	RAF	RAF	

1B 1D	1 2 3 4 5 6 7	RCMF RMF TAF TMF RSA0 RSA1	RCMF RMF TAF TMF RSAZ RSAO RAIS-CI	Interrupt Mask Register 4 Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155.
Address	Bit	DS26502 INFO3	DS2155 INFO3	DS26502 Register Description
1C 12	0 1 2 3 4 5 6 7	CRC4SA CASSA FASSA CSC0 CSC2 CSC3 CSC4 CSC5 DS26502	CASRC FASRC CRCRC DS2155	Information Register 3 Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155.
Address	Bit	E1RCR	E1RCR1	DS26502 Register Description
1D 33	0 1 2 3 4 5 6 7	RESYNC SYNCE FRC - RHDB3 RLOSA	RESYNC SYNCE FRC RCRC4 RG802 RHDB3 RSIGM RSERC	E1 Receive Control Register Note: The first address shown is the register location in the DS26502. The second is the register location from the DS2155.
	1 2 3 4 5 6 7	SYNCE FRC RHDB3 RLOSA - DS26502	SYNCE FRC RCRC4 RG802 RHDB3 RSIGM	Note: The first address shown is the register location in the DS26502. The second is the register location from the

	4	TSiS	TSiS	second is the register location from the DS2155.
	5	ARA	TUA1	
	6	TEDT	T16S	
	7	TFPT	TFPT	
Address	Bit	DS26502	DS2155	DS26502 Register Description
		LBCR	LBCR	
	0	-	FLB	
	1	-	PLB	Loopback Control Register
	2	RLB	RLB	Loopback Control Negister
20	3	LLB	LLB	Note: The first address shown is the
4A	4	-	LIUC	register location in the DS26502. The
	5	-	-	second is the register location from the DS2155.
	6	-	-	
	7	-	-	
A ddraca	D:4	DS26502	DS2155	DC2CE02 Basistas Basasintian
Address	DIT	SR5	SR5	DS26502 Register Description
	0	SA4INT	RSLIP	
	1	SA5INT	RESEM	
	2	SA6INT	RESF	Status Register 5.
21	3	SA7INT	TSLIP	Note: The first address shown is the
1E	4	SA8INT	TESEM	register location in the DS26502. The
	5	-	TESF	second is the register location from the DS2155.
	6	-	-	DS2155.
	7	-	-	
		DS26502	DS2155	
Address	Bit	IMR5	IMR5	DS26502 Register Description
	0	SA4INT	RSLIP	
	1	SA5INT	RESEM	
	2	SA6INT	RESF	Interrupt Mask Register 5.
22	3	SA7INT	TSLIP	Note: The first address shown is the
1F	4	SA8INT	TESEM	register location in the DS26502. The
	5	-	TESF	second is the register location from the DS2155.
	6	-	-	DOZ 100.

	7	-	-	
A daluaca	D:4	DS26502	DS2155	DC2CE02 Beginter Description
Address	DIT	LIC2	LIC2	DS26502 Register Description
	0	CLDS	CLDS	
	1	SCLD	SCLD	Live Later (case October Description O
	2	RCCFE	-	Line Interface Control Register 2
31	3	JACKS0	JAMUX	Note: The first address shown is the
79	4	TAIS	TUA1	register location in the DS26502. The
	5	IBPV	IBPV	second is the register location from the DS2155.
	6	LIRST	LIRST	
	7	JACKS1	ETS	
Address	Rit	DS26502	DS2155	DS26502 Register Description
Addicss		LIC3	LIC3	Dozooz Register Description
	0	TAOZ	TAOZ	
	1	-	TSCLKE	Line Interfere Control Desigton 2
	2	-	RSCLKE	Line Interface Control Register 3
32	3	MM0	MM0	Note: The first address shown is the
7A	4	MM1	MM1	register location in the DS26502. The second is the register location from the
	5	-	RCES	DS2155.
	6	CMII	TCES	
	7	CMIE	-	
Address	Rit	DS26502	DS2155	DS26502 Register Description
71441000		LIC4	LIC4	Bozooz Rogiotor Bocomption
	0	RT0	RT0	
	1	RT1	RT1	Line Interface Central Register 4
	2	RT2	TT0	Line Interface Control Register 4
33	3	TT0	TT1	Note: The first address shown is the
7B	4	TT1	MPS0	register location in the DS26502. The second is the register location from the
	5	TT2	MPS1	DS2155.
	6	MPS0	CMII	
	7	MPS1	CMIE	

New DS26502 Registers

The following registers are new in the DS26502. Please consult the DS26502 datasheet for

detailed register information. The most recent datasheet can be found at www.maxim-ic.com

Table 3 New DS26502 Registers

Address	Name	DS26502 Register Description
08	MCREG	Mode Configuration Register
09	TPCR	Transmit PLL Control Register
34	TLBC	Transmit Line Build-Out Control

Removed DS2155 Registers

The following registers existed in the DS2155 but are no longer present in the DS26502. These functions are not available on the DS26502, or the contents of these registers have been moved to another register in the memory map. Please consult the DS2155 datasheet for detailed register information. The most recent datasheet can be found at www.maxim-ic.com

Table 4 Removed DS2155 Registers

Address	Name	DS2155 Register Description
08	SSIE1	Software Signaling Insertion Enable 1
09	SSIE2	Software Signaling Insertion Enable 2
0A	SSIE3	Software Signaling Insertion Enable 3
0B	SSIE4	Software Signaling Insertion Enable 4
0C	T1RDMR1	T1 Receive Digital Milliwatt Enable Register 1
0D	T1RDMR2	T1 Receive Digital Milliwatt Enable Register 2
0E	T1RDMR3	T1 Receive Digital Milliwatt Enable Register 3
15	IIR2	Interrupt Information Register 2
1E	SR5	Status Register 5
1F	IMR5	Interrupt Mask Register 5
20	SR6	Status Register 6
21	IMR6	Interrupt Mask Register 6
22	SR7	Status Register 7
23	IMR7	Interrupt Mask Register 7
24	SR8	Status Register 8
25	IMR8	Interrupt Mask Register 8
26	SR9	Status Register 9
27	IMR9	Interrupt Mask Register 9

28	PCPR	Per-Channel Pointer Register
29	PCDR1	Per-Channel Data Register 1
2A	PCDR2	Per-Channel Data Register 2
2B	PCDR3	Per-Channel Data Register 3
2C	PCDR4	Per-Channel Data Register 4
2D	INFO4	Information Register 4
2E	INFO5	Information Register 5
2F	INFO6	Information Register 6
30	INFO7	Information Register 7
31	H1RC	HDLC #1 Receive Control
32	H2RC	HDLC #2 Receive Control
41	ERCNT	Error Count Configuration Register
42	LCVCR1	Line Code Violation Count Register 1
43	LCVCR2	Line Code Violation Count Register 2
44	PCVCR1	Path Code Violation Count Register 1
45	PCVCR2	Path Code Violation Count Register 2
46	FOSCR1	Frames Out-of-Sync Count Register 1
47	FOSCR2	Frames Out-of-Sync Count Register 2
48	EBCR1	E-Bit Count Register 1
49	EBCR2	E-Bit Count Register 2
4B	PCLR1	Per-Channel Loopback Enable Register 1
4C	PCLR2	Per-Channel Loopback Enable Register 2
4D	PCLR3	Per-Channel Loopback Enable Register 3
4E	PCLR4	Per-Channel Loopback Enable Register 4
4F	ESCR	Elastic Store Control Register
50	TS1	Transmit Signaling Register 1
51	TS2	Transmit Signaling Register 2
52	TS3	Transmit Signaling Register 3
53	TS4	Transmit Signaling Register 4
54	TS5	Transmit Signaling Register 5
55	TS6	Transmit Signaling Register 6
56	TS7	Transmit Signaling Register 7
57	TS8	Transmit Signaling Register 8
58	TS9	Transmit Signaling Register 9

50	T040	T
59	TS10	Transmit Signaling Register 10
5A	TS11	Transmit Signaling Register 11
5B	TS12	Transmit Signaling Register 12
5C	TS13	Transmit Signaling Register 13
5D	TS14	Transmit Signaling Register 14
5E	TS15	Transmit Signaling Register 15
5F	TS16	Transmit Signaling Register 16
60	RS1	Receive Signaling Register 1
61	RS2	Receive Signaling Register 2
62	RS3	Receive Signaling Register 3
63	RS4	Receive Signaling Register 4
64	RS5	Receive Signaling Register 5
65	RS6	Receive Signaling Register 6
66	RS7	Receive Signaling Register 7
67	RS8	Receive Signaling Register 8
68	RS9	Receive Signaling Register 9
69	RS10	Receive Signaling Register 10
6A	RS11	Receive Signaling Register 11
6B	RS12	Receive Signaling Register 12
6C	RS13	Receive Signaling Register 13
6D	RS14	Receive Signaling Register 14
6E	RS15	Receive Signaling Register 15
6F	RS16	Receive Signaling Register 16
70	CCR1	Common Control Register 1
71	CCR2	Common Control Register 2
72	CCR3	Common Control Register 3
73	CCR4	Common Control Register 4
74	TDS0SEL	Transmit Channel Monitor Select
75	TDS0M	Transmit DS0 Monitor Register
76	RDS0SEL	Receive Channel Monitor Select
77	RDS0M	Receive DS0 Monitor Register
7E	IAAR	Idle Array Address Register
7F	PCICR	Per-Channel Idle Code Value Register
80	TCICE1	Transmit Idle Code Enable Register 1
		20000

81	TCICE2	Transmit Idle Code Enable Register 2
82	TCICE3	Transmit Idle Code Enable Register 3
83	TCICE4	Transmit Idle Code Enable Register 4
84	RCICE1	Receive Idle Code Enable Register 1
85	RCICE2	Receive Idle Code Enable Register 2
86	RCICE3	Receive Idle Code Enable Register 3
87	RCICE4	Receive Idle Code Enable Register 4
88	RCBR1	Receive Channel Blocking Register 1
89	RCBR2	Receive Channel Blocking Register 2
8A	RCBR3	Receive Channel Blocking Register 3
8B	RCBR4	Receive Channel Blocking Register 4
8C	TCBR1	Transmit Channel Blocking Register 1
8D	TCBR2	Transmit Channel Blocking Register 2
8E	TCBR3	Transmit Channel Blocking Register 3
8F	TCBR4	Transmit Channel Blocking Register 4
90	H1TC	HDLC #1 Transmit Control
91	H1FC	HDLC #1 FIFO Control
92	H1RCS1	HDLC #1 Receive Channel Select 1
93	H1RCS2	HDLC #1 Receive Channel Select 2
94	H1RCS3	HDLC #1 Receive Channel Select 3
95	H1RCS4	HDLC #1 Receive Channel Select 4
96	H1RTSBS	HDLC #1 Receive Time Slot Bits/Sa Bits Select
97	H1TCS1	HDLC #1 Transmit Channel Select1
98	H1TCS2	HDLC #1 Transmit Channel Select2
99	H1TCS3	HDLC #1 Transmit Channel Select3
9A	H1TCS4	HDLC #1 Transmit Channel Select4
9B	H1TTSBS	HDLC #1 Transmit Time Slot Bits/Sa Bits Select
9C	H1RPBA	HDLC #1 Receive Packet Bytes Available
9D	H1TF	HDLC #1 Transmit FIFO
9E	H1RF	HDLC #1 Receive FIFO
9F	H1TFBA	HDLC #1 Transmit FIFO Buffer Available
A0	H2TC	HDLC #2 Transmit Control
A1	H2FC	HDLC #2 FIFO Control
A2	H2RCS1	HDLC #2 Receive Channel Select 1

A3	H2RCS2	HDLC #2 Receive Channel Select 2
A4	H2RCS3	HDLC #2 Receive Channel Select 3
A5	H2RCS4	HDLC #2 Receive Channel Select 4
A6	H2RTSBS	HDLC #2 Receive Time Slot Bits/Sa Bits Select
A7	H2TCS1	HDLC #2 Transmit Channel Select1
A8	H2TCS2	HDLC #2 Transmit Channel Select2
A9	H2TCS3	HDLC #2 Transmit Channel Select3
AA	H2TCS4	HDLC #2 Transmit Channel Select4
AB	H2TTSBS	HDLC #2 Transmit Time Slot Bits/Sa Bits Select
AC	H2RPBA	HDLC #2 Receive Packet Bytes Available
AD	H2TF	HDLC #2 Transmit FIFO
AE	H2RF	HDLC #2 Receive FIFO
AF	H2TFBA	HDLC #2 Transmit FIFO Buffer Available
B0	ESIBCR1	Extend System Information Bus Control Register 1
B1	ESIBCR2	Extend System Information Bus Control Register 2
B2	ESIB1	Extend System Information Bus Register 1
B3	ESIB2	Extend System Information Bus Register 2
B4	ESIB3	Extend System Information Bus Register 3
B5	ESIB4	Extend System Information Bus Register 4
B6	IBCC	In-Band Code Control Register
B7	TCD1	Transmit Code Definition Register 1
B8	TCD2	Transmit Code Definition Register 2
B9	RUPCD1	Receive Up Code Definition Register 1
BA	RUPCD2	Receive Up Code Definition Register 2
BB	RDNCD1	Receive Down Code Definition Register 1
BC	RDNCD2	Receive Down Code Definition Register 2
BD	RSCC	In-Band Receive Spare Control Register
BE	RSCD1	Receive Spare Code Definition Register 1
BF	RSCD2	Receive Spare Code Definition Register 2
C5	IBOC	Interleave Bus Operation Control Register
DB	BAWC	BERT Alternating Word Count Rate
DC	BRP1	BERT Repetitive Pattern Set Register 1
DD	BRP2	BERT Repetitive Pattern Set Register 2
DE	BRP3	BERT Repetitive Pattern Set Register 3

DF	BRP4	BERT Repetitive Pattern Set Register 4
E0	BC1	BERT Control Register 1
E1	BC2	BERT Control Register 2
E3	BBC1	BERT Bit Count Register 1
E4	BBC2	BERT Bit Count Register 2
E5	BBC3	BERT Bit Count Register 3
E6	BBC4	BERT Bit Count Register 4
E7	BEC1	BERT Error Count Register 1
E8	BEC2	BERT Error Count Register 2
E9	BEC3	BERT Error Count Register 3
EA	BIC	BERT Interface Control Register
EB	ERC	Error Rate Control Register
EC	NOE1	Number-of-Errors 1
ED	NOE2	Number-of-Errors 2
EE	NOEL1	Number-of-Errors Left 1
EF	NOEL2	Number-of-Errors Left 2

Conclusion

For further questions concerning migrating software from the DS2155 to the DS26502, please contact the Dallas Semiconductor Telecommunications applications support team via email at telecom.support@dalsemi.com or call 972-371-6555.

Datasheets for the DS2155 and the DS26502 are available online at www.maxim-ic.com/telecom/

More Information

DS2155: QuickView -- Full (PDF) Data Sheet -- Free Samples

DS26502: QuickView -- Full (PDF) Data Sheet -- Free Samples