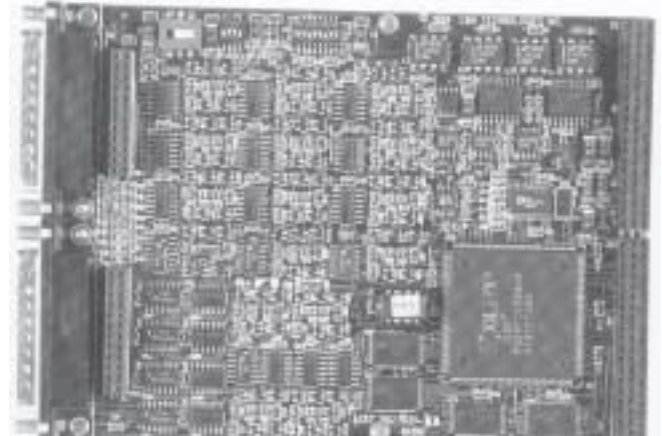


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# 16-Channel Digital Word Generator/Timing Simulator Model MA202



The MA202 is a 16 channel digital word generator and timing simulator module that outputs timing data at a rate up to 10 MHz. A special mode allows limited operation up to 20 MHz. As a digital word generator (DWG), the MA202 can generate a serial train of parallel output words at a fixed output clock rate. As a timing simulator (TS), the MA202 can produce almost any conceivable asynchronous digital signal within the 100 ns resolution. Pattern memory is 32 k words. The MA202 is part of a replacement solution for the obsolete Interface Technology RS648.

## SPECIFICATIONS

### Functions Performed

Digital word generator (DWG)  
Timing simulator (TS)

### Output Characteristics

16 Channels all tri-stateable or DWG  
8 Channels tri-stateable or 16  
Channels nontri-stateable for TS  
Synchronized Output Signal  
Channel outputs are TTL compatible  
with  $I_{OL} = 64 \text{ mA}$  &  $I_{OH} = -15 \text{ mA}$

### Pattern Rate (max)

10 MHz (20 MHz special mode)

### Resolution

0.186 Hz

### User selectable clock sources

On board programmable to 10 MHz  
External clock input  
Backplane trigger

### Dynamic Update Capability

Allows varying selected parameter on-the-fly

### Operating Modes

Single or fixed number of Cycles  
Continuous Cycle

### External Inputs

Trigger/Gate and Clock  
TTL, CMOS or 0 V Threshold  
High Z (>100 K $\Omega$ ) or 50  $\Omega$

### Interrupt

End of each loop in Continuous Mode  
End of specified number of cycles in  
Fixed Cycle Mode

### Temperature

Operating: 0° C to 50° C  
Storage: -40° C to 70° C

### Power

+5 V @ 500 mA  
+12 V @ 100 mA  
-12V @ 80 mA

### M-Module Compliance

Complies with ANSI/VITA Std. 12-1996 for doublewide MA-Modules

Data Transfers: 16 bit  
Interrupts: INTC  
Triggers:

TrigA & TrigB compatible with  
VXI, VME, PC, cPCI and other  
M-Module carriers.

### Applications

Digital word generator  
Timing simulator  
Multi-channel synchronous PG  
Spark plug/Injector firing signals

### Ordering Information

Part Number: 11027520-0001