

## MC2301 Digital Signal Memory Evaluation Board

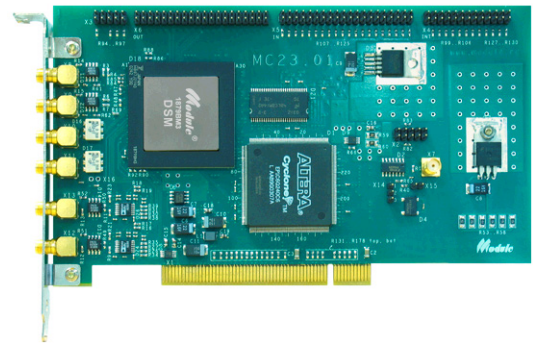
**MC2301** is a PCI Digital Signal Memory (DSM) Evaluation Board designed for high frequency analog signal processing, complex high frequency analog signals generation and DSP software/hardware prototyping and development.

The **MC2301** has one 1879BM3 DSM System-On-A-Chip (SoC), 64MB SDRAM bank, analog input and output buffers and PCI host interface. The shared memory is accessible for reading/writing both from DSM chip and PCI bus.

### Features:

**Digital processing of quadrature components of input and output signals up to 600 MSPS on the fly!**

- 1879BM3 DSM SoC: programmable 128-bit on-chip controller and DSP, 2Mbit on-chip SRAM
- two 600 MSPS 6-bit ADC inputs
- two 600 MSPS 8-bit DAC outputs
- 64Mbytes on-board SDRAM



### Applications:

- Radar & Sonar
- Measuring systems
- Telecommunications
- Security
- Automotive
- Avionics

### Support Software:

1879BM3 DSM Assembler and PC simulator,  
PCI driver for Windows 95/98/Me/NT/2000/XP.

## Specifications:

### Processor:

1879BM3 DSM	one
processor core clock frequency	up to 600 MHz
Internal bus width	128 bit

### Memory:

64 MB SDRAM	
Data exchange rate between 1879BM3 DSM and SDRAM	up to 600 Mbytes/sec

### Input/Output:

ADC channel (6 bits, up to 600 million samples/sec)	2
DAC channel (8 bits, up to 600 million samples/sec)	2
General purpose digital inputs	16
General purpose digital outputs	20
External interruption Inputs	8
PCI bus throughput	up to 132 Mbyte/sec

### Performance:

1879BM3 DSM digital part performance	up to 2,4 GMAC
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### Power:

supply:	+5.0/+3.3/-12 V
consumption:	approx. 8.0 W

### Design:

Half-size PCI board