DALLAS SEMICONDUCTOR

DS1280
3-Wire to Bytewide Converter Chip

FEATURES

- Adapts JEDEC bytewide memory to a 3-wire serial port
- Supports 512K bytes of memory
- 68-pin version provides arbitration mechanisms for dual port operation
- CMOS circuitry design for battery backup and battery operate applications
- Cyclic redundancy check monitors serial data transmission for error
- Available in 44- or 80-pin quad flat pack for high density requirements

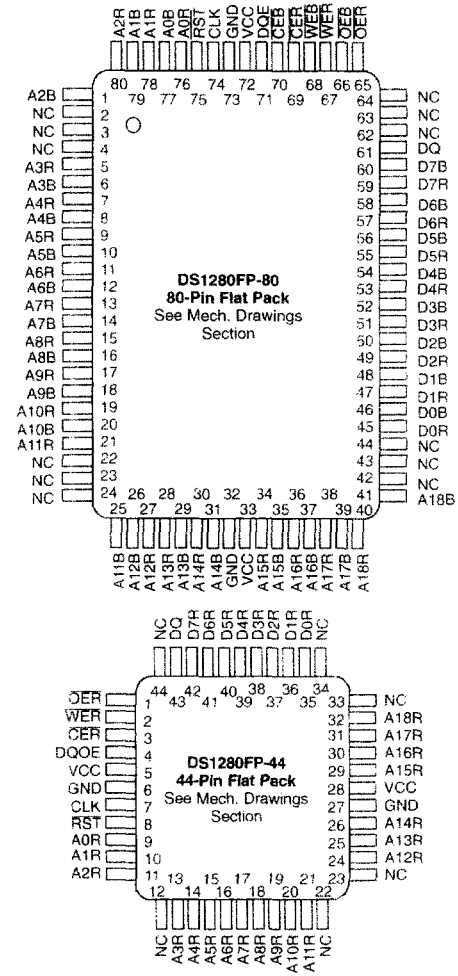
ORDERING INFORMATION

DS1280FP-XX	-80	80-pin Flat Pack
	-44	44-pin Flat Pack

PIN DESCRIPTION

$\overline{RST}$	–	Reset For Serial Port
DQ	–	Data Input/Output For Serial Port
CLK	–	Clock Input For Serial Port
DQE	–	Serial Port Active Output
$\overline{CEB}$	–	System Bus Enable
$\overline{OEB}$	–	System Bus Read Enable
$\overline{WEB}$	–	System Bus Write Enable
A0B-A18B	–	System Address Bus
D0B-D7B	–	System Data Bus
$\overline{CER}$	–	RAM Chip Enable
$\overline{WER}$	–	RAM Write Enable
$\overline{OER}$	–	RAM Output Enable
A0R-A18R	–	RAM Address Bus
D0R-D7R	–	RAM Data Bus
GND	–	Ground
V_{CC}	–	+5 Volts

PIN ASSIGNMENT



DESCRIPTION

The DS1280 adds a 3-wire serial port to a bytewide static RAM yet maintains the existing bytewide port. Memory capacity of up to 512K bytes can be addressed directly. Arbitration between the serial and bytewide port is accomplished by handshaking or using predictable idle time as an access window. The serial port requires a 6-byte protocol to set up memory transfers. Cyclic redundancy check circuitry is included to monitor serial data transmission for error.