

January 15, 2002
DALLAS SEMICONDUCTOR'S
NEW PRODUCT RELEASE

DS1254W
2M x 8 NV SRAM with Phantom Clock

FOR PRODUCT RELATED INFORMATION CONTACT
THE BUSINESS MANAGER: Lee Cash

DATA SHEET AVAILABLE: Now

ADVERTISEMENT SHOWS: N/A

FOR ALL OTHER INFORMATION CONTACT
THE DIRECTOR OF DISTRIBUTION: Ken Bloom

EV KIT AVAILABLE: No

PRESS RELEASE SHOWS: Within 4 weeks

PRODUCT DESCRIPTION

The DS1254W is a fully static nonvolatile RAM (organized as 2M words by 8 bits) with built-in real-time clock. It has self-contained control circuitry that constantly monitors V_{CC} for an out-of-tolerance condition. When such a condition occurs, the DS1254W makes use of an attached DS3800 battery cap to maintain clock information and preserve stored data, while protecting that data by disallowing all memory accesses. Additionally, the DS1254W has dedicated circuitry for monitoring the status of an attached DS3800 battery cap. The DS1254W operates at 3.3V and complements the already released DS1254Y 5V version. *See the attached data sheet page(s) for more information.*

APPLICATION AREAS

- Telecom Switches
- Routers
- RAID Systems

PRICING

See the attached price list page(s) for more information.

DISTRIBUTOR/SALES INFORMATION (*Please enter your stocking orders with the factory now.*)

SAMPLES AVAILABLE: No. Because of the DS1254W price, we do not offer free samples for every request. However, if you have a customer that needs samples for evaluation, please contact the Mixed Signal II business unit.

PLACE STOCKING ORDERS: This should not be a distributor-stocked item.

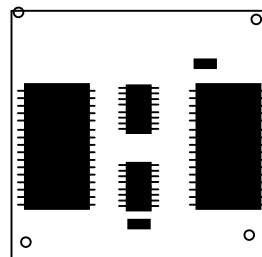
PLACE PRODUCTION ORDERS: Now (12-week lead)

For sales strategy and competitive information, look for these parts in a forthcoming Dallas Advantage issue.

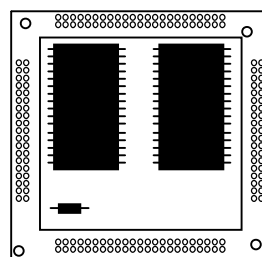
FEATURES

- Real-time clock (RTC) keeps track of hundredths of seconds, seconds, minutes, hours, days, date, months, and years with automatic leap-year compensation valid up to the year 2100
- 2M x 8 NV SRAM
- Watch function is transparent to RAM operation
- Automatic data protection during power loss
- Unlimited write-cycle endurance
- Surface-mountable BGA module construction
- Over 10 years of data retention in the absence of power
- Battery monitor checks remaining capacity daily
- +3.3V or +5V operation

PACKAGE OUTLINE



Side -A- Shown
(For Reference Only, Not to Scale)



BGA Module Base
Bottom View

ORDERING INFORMATION

PART	DESCRIPTION
DS1254X	2M x 8 NV SRAM with Phantom Clock
└─ W	+3.3V operation
└─ Y	+5.0V operation

PIN DESCRIPTION

V _{CC}	- Supply Voltage
A0–A20	- Address Inputs
DQ0–DQ7	- Data I/O
$\overline{\text{CE}}$	- Chip Enable Input
$\overline{\text{OE}}$	- Output Enable Input
$\overline{\text{WE}}$	- Write Enable Input
BW	- Battery Warning Output (Open Drain)
GND	- Ground