

MB82VP032-6/-7/-8

CMOS 32K x 32 SYNCHRONOUS SRAM

CMOS 32768 WORDS BY 32-BIT SYNCHRONOUS STATIC RANDOM ACCESS MEMORY

The Fujitsu MB82VP032 is a 1M bit CMOS Synchronous Static Random Access Memory (SSRAM) containing 1,048,576 memory cells accessible in a 32-bit format. The MB82VP032 features a fully synchronous operation referenced to a positive edge clock whereby all operations are synchronized at a clock input which enables high performance and simple user interface coexistence.

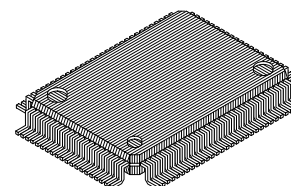
The MB82VP032 SRAM integrates 32K x 32 SRAM core, input registers, burst counters, write data buffers, and high performance output circuits. In addition, MB82VP032 integrates output registers for pipelined operation so the system may possess more timing margin.

The MB82VP032 is housed in a 100-pin plastic TQFP package. The MB82VP032 features 3.3V low voltage power supply and I/O level is confirmed JEDEC LVTTTL standards.

The MB82VP032 is fabricated with Fujitsu high performance CMOS technology.

FEATURES

- **Pipelined operation**
- Clock controlled, registered address, data I/O and control
- Clock: 6ns access/10ns cycle, 7ns access/12ns cycle and 8ns access/15ns cycle
- Burst access function (Interleaved or linear burst)
- Single +3.3V supply – 0.2V / + 0.3V tolerance
- Three Chip Enables for simple memory depth expansion
- Individual BYTE Write and GLOBAL Write control
- Internally self-timed Write cycle
- Write pass-through capability
- 100 pin JEDEC standard TQFP package (M \bar{O} 136DJ)
- 5V tolerant input for Input pins



PLASTIC PACKAGE
FPT-100P-M16

ABSOLUTE MAXIMUM RATINGS (see NOTE.)

Parameter	Symbol	Value	Unit
Supply Voltage	VCC	–0.5 to +4.6	V
Input Voltage on any pin referenced to GND	VIN	–0.5 to +6.0	V
I/O Voltage on any pin referenced to GND	VI/O	–0.5 to VCC+0.5	V
Power Dissipation	PD	1.5	W
Output Current	IOUT	±50	mA
Temperature under Bias	TBIAS	–10 to +85	°C
Storage Temperature	TSTG	–40 to +125	°C

NOTE: Permanent device damage may occur if the above **Absolute Maximum Ratings** are exceeded. Functional operation should be restricted to the conditions as detailed in the operational sections of this data sheet. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Package and Ordering Information

– 100-pin plastic TQFP,
order as MB82VP032–xxLQ

This device contains circuitry to protect the inputs against damage due to high static voltages or electric fields. However, it is advised that normal precautions be taken to avoid application of any voltage higher than maximum rated voltages to this high impedance circuit.