

# 512 Mbit Consumer FCRAM™

## 1.8 V, × 64, Low Power DDR SDRAM, SiP-oriented

### MB81EDS516445

#### ■ FEATURES

- RAM featuring low power consumption, high data bandwidth, and wide operating temperature range
- Low Power DDR SDRAM interface
- 2M-word × 64-bit × 4-bank organization
- 1.8V Power Supply ( $V_{DD}=V_{DDQ}$ )
- Junction Temperature  $T_J = -10^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Clock stop capability during idle period
- Auto precharge option for each burst access
- Configurable Driver Strength and Pre Driver Strength
- Auto Refresh and Self Refresh Modes
- Deep Power Down Mode

#### ■ MAIN SPECIFICATIONS

Part Number	MB81EDS516445	
Organization	2 M-word × 64-bit × 4-bank	
Interface	CMOS, Low Power DDR	
Supply Voltage	1.7 V to 1.9 V	
Junction Temperature ( $T_J$ )	$-10^{\circ}\text{C}$ to $+125^{\circ}\text{C}$	
Burst Operating Frequency (Max.)	$T_J \leq 105^{\circ}\text{C}$	216 MHz
	$T_J \leq 125^{\circ}\text{C}$	200 MHz
Data Transfer Rate (Max.)	$T_J \leq 105^{\circ}\text{C}$	3.46 GByte / s
	$T_J \leq 125^{\circ}\text{C}$	3.2 GByte / s

Note: FCRAM is a trademark of FUJITSU MICROELECTRONICS LIMITED, Japan.