

**ACT512EU64Q8F800S**  
**512MB DDR2-667 Unbuffered non-ECC DIMM**
**Description**

ACTICA ACT512EU64Q8F800S is a high speed 512MB DDR2-800 Unbuffered non-ECC DIMM. It is designed for mission critical application memory solution. The modules is constructed using Samsung SDRAMs, and is fully compliant with JEDEC specifications. Decoupling capacitors are mounted on the PCB board for better signal integrity. The DIMM feature serial presence detect (SPD) based on a serial EEPROM device using the 2-pin I2C protocol.

Features	Value
ACTICA memory P/N	ACT512EU64Q8F800S
CL-tRCD-tRP	5-5-5
RoHS compliant	Yes
Supply Voltage	1.8V ± 0.1V
JEDEC standard	Yes
Operating Temperature*	0 - 95 °C
<b>Timing Parameter:</b>	
tCK (Clock Cycle Time)	2.5ns
tRCD (Ras and Cas Delay)	12.5ns
tRP (Row Precharge Time)	12.5ns
tRAS (Row Active Time)	45ns
tIH (Input Hold Time)	250ps
tIS (Input Setup Time)	175ps
<b>Operating Current:</b>	
IDD0 (Operating one bank active-precharge current)	690 mA
IDD1 (Operating one bank active-read-precharge current)	750 mA
IDD2P (Precharge power-down current)	63 mA
IDD3N (Active standby current)	450 mA
IDD6 (Self refresh current)	63 mA

\* At 85 - 95 °C operation temperature range, doubling refresh commands in frequency to a 32ms period ( tREFI=3.9 us ) is required, and to enter to self refresh mode at this temperature range, an EMRS command is required to change internal refresh rate.

**Physical Dimension** (drawing not in scale) Units : in Millimeters
