

Overview

The IS66WVD1M16ALL is an integrated memory device containing 16Mbit Pseudo Static Random Access Memory using a self-refresh DRAM array organized as 1M words by 16 bits. The device uses a multiplexed address and data bus scheme to minimize pins and includes a industry standard burst mode for increased read and write bandwidth. The device includes several power saving modes : Reduced Array Refresh mode where data is retained in a portion of the array and Temperature Controlled Refresh. Both these modes reduce standby current drain. The device can be operated in a standard asynchronous mode and high performance burst mode. The die has separate power rails, VDDQ and VSSQ for the I/O to be run from a separate power supply from the device core.

- I Single device supports asynchronous and burst operation
- I Mixed Mode supports asynchronous write and synchronous read operation
- I Dual voltage rails for optional performance
VDD 1.7V~1.95V, VDDQ 1.7V~1.95V
- I Multiplexed address and data bus
ADQ0~ADQ15
- I Asynchronous mode read access : 70ns
- I Burst mode for Read and Write operation
4, 8, 16 or Continuous
- I Low Power Consumption
 - Asynchronous Operation < 25 mA
 - Burst operation < 45 mA (@133Mhz)
 - Standby < 80 uA(max.)
 - Deep power-down (DPD) < 3uA (Typ)
- I Low Power Feature
 - Reduced Array Refresh
 - Temperature Controlled Refresh
- I Operation Frequency up to 133MHz
- I Operating temperature Range
Industrial -40