



Long-Term Support
World Class Quality

SERIAL SRAM

SRAM based Memory with SPI Bus Interface
512Kb, 1Mb, 2Mb, 4Mb

Product Features:

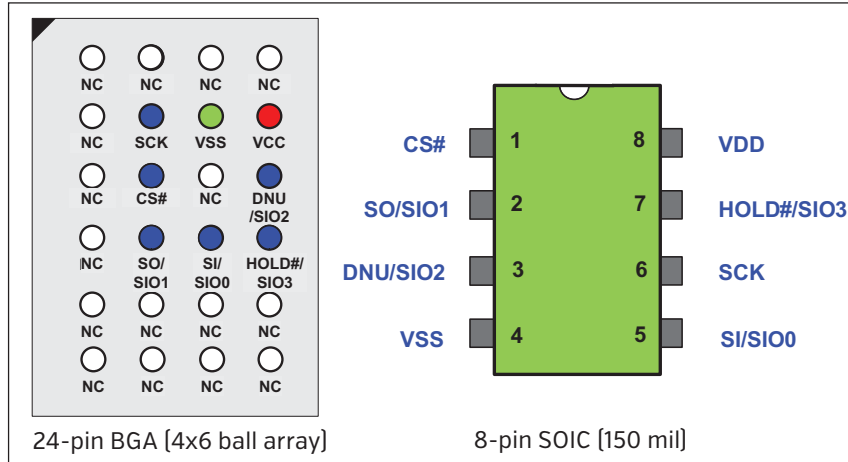
- SPI [Serial Peripheral Interface] Compatible Bus
 - SPI[x1] / SDI[x2] / SQI[x4] mode
- Very Low Bus Signal Count:
 - 6 pins for x4 IO ; CS#, SCK, SIO0 - SIO3
 - 4 pins for x1/x2 IO : CS#, SCK, SI[SIO0], SO[SIO1]
- Very Simple Commands: 7 commands
 - Read/Write Memory
 - Read /Write Register
 - Enter SDI [x2]/SQI mode[x4], Return to SPI mode [x1]
- Max. Frequency*:
 - 16MHz at VDD = 1.8V
 - 20MHz at VDD = 3.0V
- Ultra Low Power Consumption:
 - Read Current at 20MHz, 3.6V = 8 mA [Max]
 - Standby Current = 4µA [Typ]
- 3 Read Mode:
 - Byte Read mode
 - Page Read mode
 - Sequential Read mode
- 32-byte page size
- LVCMOS compatible input

- **Densities:**
 - 512Kb, 1Mb, 2Mb, 4Mb
- **Availability:**
 - 512Kb, 1Mb, 2Mb
 - Production Now
 - 4Mb
 - Samples: 1Q 2018
- **Temperature Grades:**
 - Industrial, I [-40°C to 85°C]
 - Automotive, A3 [-40°C to 125°C]
- **Applications:**
 - IoT
 - Advanced Driver Assistance Systems
 - Industrial Application
 - Medical
- **Package:**
 - KGD/KTD
 - 8-pin SOIC (150 mil)
 - 24-pin BGA [4x6 ball array]

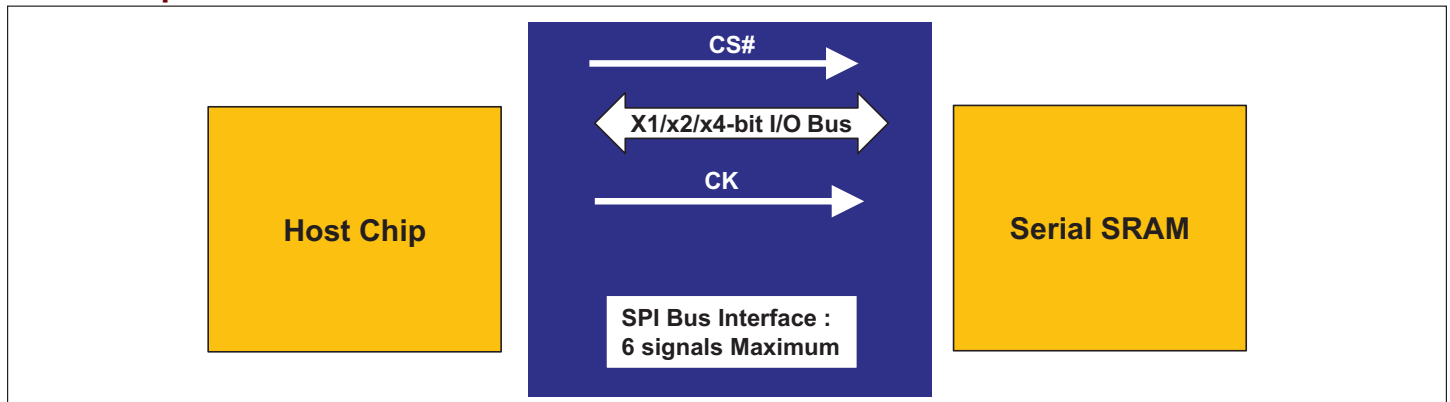
Key Benefits of Serial SRAM:

1. Low Signal Pin Count & Smaller Footprint: 4 vs 30
 - Minimum 4 Signal Pins for 4Mb [x1]: SI, SO, CK, CS#
 - 30 signals for 4Mb SRAM [x8] : 19 Address, 8 IOs, 3 Controls
2. Simple SPI Compatible Bus & LVCMOS Compatible Input
 - Easy to use on the existing interface - FPGA, MCU
3. Random Read/Write Operation with Ultra Low Standby Current
 - SRAM Performance with much smaller Footprint, with 4µA Standby Current

Serial SRAM Pin-Outs



Serial Peripheral Interface



*Please contact ISSI for 50MHz option