



Long-Term Support
World Class Quality

DRAM

DDR4

ISSI DDR4 Product Features:

- Standard Voltage: VDD = VDDQ = 1.2V, VPP=2.5V
- Data Integrity
 - Auto Self Refresh (ASR) by DRAM built-in TS
 - Auto Refresh and Self Refresh Modes
- DRAM access bandwidth
 - Separated IO gating structures by Bank Group
 - Self Refresh Abort
 - Fine Granularity Refresh
- Signal Synchronization
 - Write Leveling via MR settings
 - Read Leveling via MPR
- Reliability & Error Handling
 - Command/Address Parity
 - Data bus Write CRC
 - MPR readout
 - Boundary Scan (x16)
- Signal Integrity
 - Internal VREFDQ Training
 - Read Preamble Training
 - Gear Down Mode
 - Per DRAM Addressability
 - Configurable DS for system compatibility
 - Configurable On-Die Termination
 - Data bus Inversion (DBI)
 - ZQ Calibration for DS/ODT impedance accuracy via external ZQ pad (240 ohm +/-1%)
- Power Saving and efficiency
 - POD with VDDQ termination
 - Command/Address Latency (CAL)
 - Maximum Power Saving
 - Low power Auto Self Refresh (LPASR)
- Operating Temperature
 - Commercial (Tc = 0C to + 95C)
 - Industrial (Tc = -40C to + 95C)
 - Automotive, A1 (Tc = -40C to + 95C)
 - Automotive, A2 (Tc = -40C to + 105C)
 - Automotive, A3 (Tc = -40C to + 125C)

Applications:

- **Automotive**
 - Infotainment
 - Telematics
 - Driver Information Systems
- **Telecom/Networking**
 - SDN, NFV
 - Access & Aggregation Nodes
 - Switches and Routers
 - Packet Optical Transport
 - Network Storage (PON OLT, DSLAM, CMTS, Wireless)
- **Industrial**
 - Human Machine Interface
 - Embedded Computing

ISSI DDR4 SDRAM Ordering Options

Den	Speeds	Part No.	Org.	Pkg.	Status
4G	2666,2400,2100	IS43QR85120B	512Mx8	BGA[78]	S=Q4/19
	2666,2400,2100	IS43QR16256B	256Mx16	BGA[96]	S=NOW
8G	3200,2933,2666,2133,1866,1600	IS43QR81024A	1Gx8	BGA[78]	S=Q1/20
	3200,2933,2666,2133,1866,1600	IS43QR16512A	512Mx16	BGA[96]	S=Q1/20

ISSI DDR4 SDRAM Automotive Ordering Options

Den	Speeds	Part No.	Org.	Pkg.	Status
4G	2666,2400,2100,1866,1600	IS46QR85120B	512Mx8	BGA[78]	S=Q4/19
	2666,2400,2100,1866,1600	IS46QR16256B	256Mx16	BGA[96]	S=Q3/19
8G	3200,2933,2666,2400,2133,1866,1600	IS46QR81024A	1Gx8	BGA[78]	S=Q2/20
	3200,2933,2666,2400,2133,1866,1600	IS46QR16512A	512Mx16	BGA[96]	S=Q2/20