



DDR3 SDRAM

Up to 1866Mbps data rate

► ISSI DDR3 Product Features:

- Bidirectional differential data strobe
- Data masking per byte on Write commands
- Programmable burst length of 4 or 8
- Programmable CAS Latency
- Auto-Refresh and Self-Refresh Modes
- OCD (Driver Adjustment)
- ODT (On Die Termination) supported
- Write Leveling
- Packages: 96-ball BGA for x16, 78-ball BGA for x8
- Long-term support

► Applications:

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

Key Timing Parameters

Speed Grade	-187F	-15G	-15H	-125J	-125K	-107L	-107M	Units
	DDR3-1066	DDR3-1333	DDR3-1333	DDR3-1600	DDR3-1600	DDR3-1866	DDR3-1866	
CL-tRCD-tRP	7-7-7	8-8-8	9-9-9	10-10-10	11-11-11	12-12-12	13-13-13	tCK
tCK (CL = 7)	1.875	1.875	1.875	1.875	1.875	1.875	1.875	ns
tCK (CL = 8)	--	1.5	1.875	1.5	1.875	1.875	1.875	ns
tCK (CL = 9)	--	--	1.5	1.5	1.5	1.5	1.5	ns
tCK (CL = 10)	--	--	--	1.25	1.5	1.5	1.5	ns
tCK (CL = 11)	--	--	--	--	1.25	1.25	1.25	ns
tCK (CL = 12)	--	--	--	--	--	1.07	--	ns
tCK (CL = 13)	--	--	--	--	--	--	1.07	ns
Frequency (max)	533	666	666	800	800	933	933	MHz

Note: These are general specs. For any given part number, please refer to the corresponding datasheet.

ISSI DDR3 Ordering Options

Part No.	Den.	Org.	Speeds	Pkg.	Ordering Options	Status
IS43TR16640A(L)	1G	64M x 16	DDR3-1333, DDR3-1600	BGA(96)	-15GBL, -15GBLI, -125JBL, -125JBLI	Prod
IS43TR81280A(L)		128M x 8		BGA(78)		Prod
IS43TR16128A(L)	2G	128M x 16	DDR3-1066, DDR3-1333, DDR3-1600, DDR3-1866	BGA(96)	-187FBL, -187FBLI, -15HBL, -15HBLI, -125KBL, -125KBLI, -107MBL, -107MBLI,	Prod
IS43TR16128B(L)			DDR3-1333, DDR3-1600, DDR3-1866		-15HBL, -15HBLI, -125KBL, -125KBLI, -107MBL, -107MBLI	S=Now
IS43TR82560A(L)		256M x 8	DDR3-1066, DDR3-1333, DDR3-1600, DDR3-1866	BGA(78)	-187FBL, -187FBLI, -15HBL, -15HBLI, -125KBL, -125KBLI, -107MBL, -107MBLI,	Prod
IS43TR82560B(L)			DDR3-1333, DDR3-1600, DDR3-1866		-15HBL, -15HBLI, -125KBL, -125KBLI, -107MBL, -107MBLI	S=Now
IS43TR16256A(L)	4G	256M x 16	DDR3-1333, DDR3-1600, DDR3-1866	BGA(96)	-15HBL, -15HBLI, -125KBL, -125KBLI, -107MBL, -107MBLI	Prod
IS43TR85120A(L)		512M x 8		BGA(78)		S=Now

Notes:

1. Automotive grade DDR3 part numbers begin with "IS46TR".
2. Contact ISSI for DDR3L ordering options. DDR3L is denoted with "L".
3. S = Samples, Prod = Production