

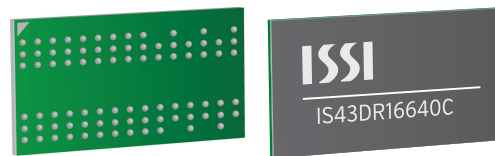


Long-Term Support
World Class Quality

DDR2 SDRAM
Up to 800Mbps data rate

DDR2 Product Features:

- Single supply voltage of 1.8V ± 0.1V
- SSTL_18 compatible inputs
- Bidirectional differential or single-ended data strobe option
- Data masking per byte on Write commands
- Programmable burst length of 4 or 8
- Programmable CAS Latency of 3, 4, 5 or 6
- Auto-Refresh and Self-Refresh Modes
- OCD (Off-Chip Driver Impedance Adjustment)
- ODT (On Die Termination) supported
- Packages: 126-ball BGA for x32, 84-ball BGA for x16, 60-ball BGA for x8
- Long-Term Support



Applications:

- **Telecom**
Access Nodes
[PON OLT, DSLAM, CMTS, Wireless]
Aggregation Nodes
VoIP
Switches and Routers
Packet Optical Transport
- **Automotive**
Infotainment
Telematics
Driver Information Systems
- **Other**
Set-top boxes / DVRs
Network storage
And many more

Key Timing Parameters

Speed Grade	-37C	-3D	-25E	-25D	Units
	DDR2-533C	DDR2-667D	DDR2-800E	DDR2-800D	
CL-tRCD-tRP	4-4-4	5-5-5	6-6-6	5-5-5	tCK
tCK [CL = 3]	5	5	5	5	ns
tCK [CL = 4]	3.75	3.75	3.75	3.75	ns
tCK [CL = 5]	3.75	3	3	2.5	ns
tCK [CL = 6]	3.75	3	2.5	2.5	ns
Frequency [max]	266	333	400	400	MHz

ISSI DDR2 Ordering Options

Den.	Part No.	Org.	Speeds	Pkg.	Ordering Options	Status
256M	IS43DR32801B	8Mx32	DDR2-533C, DDR2-667D	BGA(126)	-37CBL, -37CBLLI, -3DBL, -3DBLLI	Prod
	IS43DR16160B	16Mx16	DDR2-533C, DDR2-667D, DDR2-800D	BGA(84)	-37CBL, -37CBLLI, -3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
512M	IS43DR32160C	16Mx32	DDR2-533C, DDR2-667D	BGA(126)	-37CBL, -37CBLLI, -3DBL, -3DBLLI	Prod
	IS43DR16320D	32Mx16	DDR2-667D, DDR2-800D	BGA(84)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR16320E	32Mx16	DDR2-667D, DDR2-800D	BGA(84)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR86400D	64Mx8	DDR2-667D, DDR2-800D	BGA(60)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR86400E	64Mx8	DDR2-667D, DDR2-800D	BGA(60)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
1G	IS43DR16640B	64Mx16	DDR2-667D, DDR2-800D	BGA(84)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR16640C	64Mx16	DDR2-667D, DDR2-800D	BGA(84)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR81280B	128Mx8	DDR2-667D, DDR2-800D	BGA(60)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR81280C	128Mx8	DDR2-667D, DDR2-800D	BGA(60)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
2G	IS43DR16128C	128Mx16	DDR2-667D, DDR2-800D	BGA(84)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod
	IS43DR82560C	256Mx8	DDR2-667D, DDR2-800D	BGA(60)	-3DBL, -3DBLLI, -25DBL, -25DBLLI	Prod

Notes:

1. Automotive grade DDR2 part numbers begin with "IS46DR".
2. Contact ISSI for leaded BGA or other ordering options
3. Prod = Production