



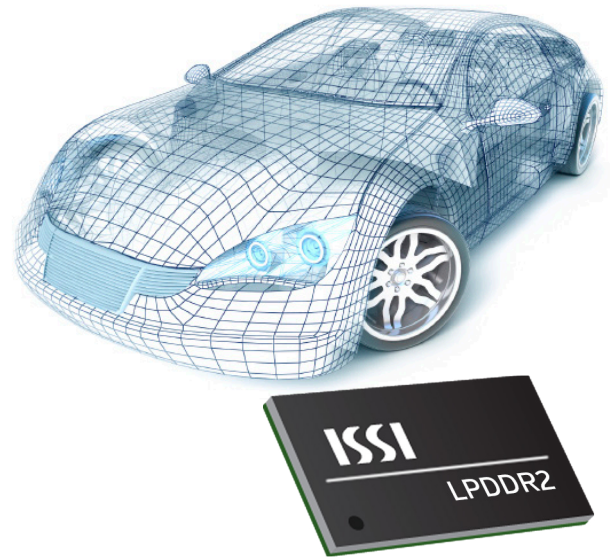
Long-Term Support  
World Class Quality

# DRAM

## LPDDR2 DRAM

### Features:

- Low-voltage Core and I/O Power Supplies  
VDD2 = 1.14-1.30V  
VDDCA/VDDQ = 1.14-1.30V  
VDD1 = 1.70-1.95V
- High Speed Un-terminated Logic  
[HSUL\_12] I/O Interface
- Clock Frequency Range :  
10MHz to 533MHz  
[data rate range : 20Mbps to 1066 Mbps per I/O]
- Four-bit Pre-fetch DDR Architecture
- Multiplexed, double data rate, command/address inputs
- 4 or 8 internal banks for concurrent operation
- Bidirectional/differential data strobe per byte of data  
[DQS/DQS#]
- Programmable Read/Write latencies [RL/WL] and burst lengths [4,8 or 16]
- Per-bank refresh for concurrent operation
- ZQ Calibration
- On-chip temperature sensor to control self refresh rate
- Partial -array self refresh [PASR]
- Bank & Segment masking
- Deep power-down mode [DPD]
- Long-Term Support



### Temperature Grades:

- Commercial [ 0°C to 85°C ]
- Industrial [ -40°C to 85°C ]
- Automotive, A1 [ -40°C to 85°C ]
- Automotive, A2 [ -40°C to 105°C ]
- Automotive, A25 [-40°C to 115°C ]
- Automotive, A3[-40°C to 125°C]

### ISSI LPDDR2 DRAM Ordering Options

Den	Org	Part Number	Vcc	Refsh	Speed(Mhz)	Pkg(Pins)	Status
256Mb	16Mx16	IS43/46LD16160B	1.2/1.8V	4K	533,400	BGA[134], PoP[168]	Prod
	8Mx32	IS43/46LD32800B	1.2/1.8V	4K	533,400	BGA[134], PoP[168]	Prod
512M	32Mx16	IS43/46LD16320A	1.2/1.8V	4K	533,400	BGA[134]	Prod
	16Mx32	IS43/46LD32160A	1.2/1.8V	4K	533,400	BGA[134]	Prod
1G	64Mx16	IS43/46LD16640C	1.2/1.8V	4K	533,400	BGA[134]	Prod
	64Mx16	IS43/46LD16640D	1.2/1.8V	4K	533,400	BGA[134]	Prod
	32Mx32	IS43/46LD32320C	1.2/1.8V	4K	533,400	BGA[134]	Prod
	32Mx32	IS43/46LD32320D	1.2/1.8V	4K	533,400	BGA[134]	Prod
2G	128Mx16	IS43/46LD16128C	1.2/1.8V	8K	533,400	BGA[134]	Prod
	64Mx32	IS43/46LD32640C	1.2/1.8V	8K	533,400	BGA[134]	Prod
4G	256Mx16	IS43/46LD16256C	1.2/1.8V	8K	533,400	BGA[134]	S=Q1/23
	128Mx32	IS43/46LD32128C	1.2/1.8V	8K	533,400	BGA[134], PoP[168]	S=NOW
	128Mx32	IS43/46LD32128B	1.2/1.8V	8K	533,400	BGA[134], PoP[168]	Prod