

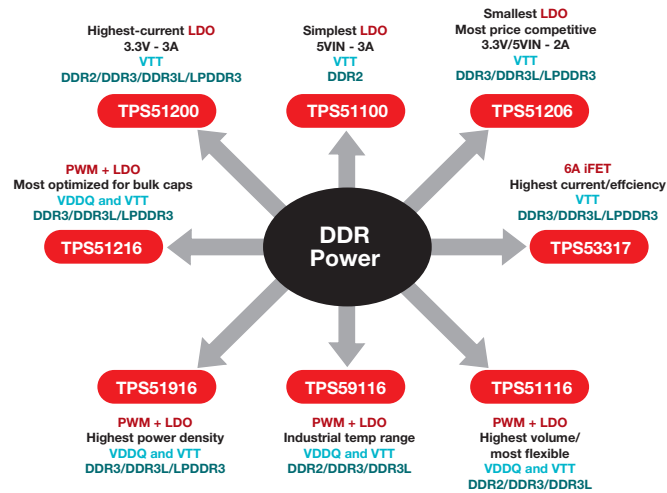
Power and Memory Interface Solutions for DDR



Micron® DDR Memory Products and TI DDR Power Solutions

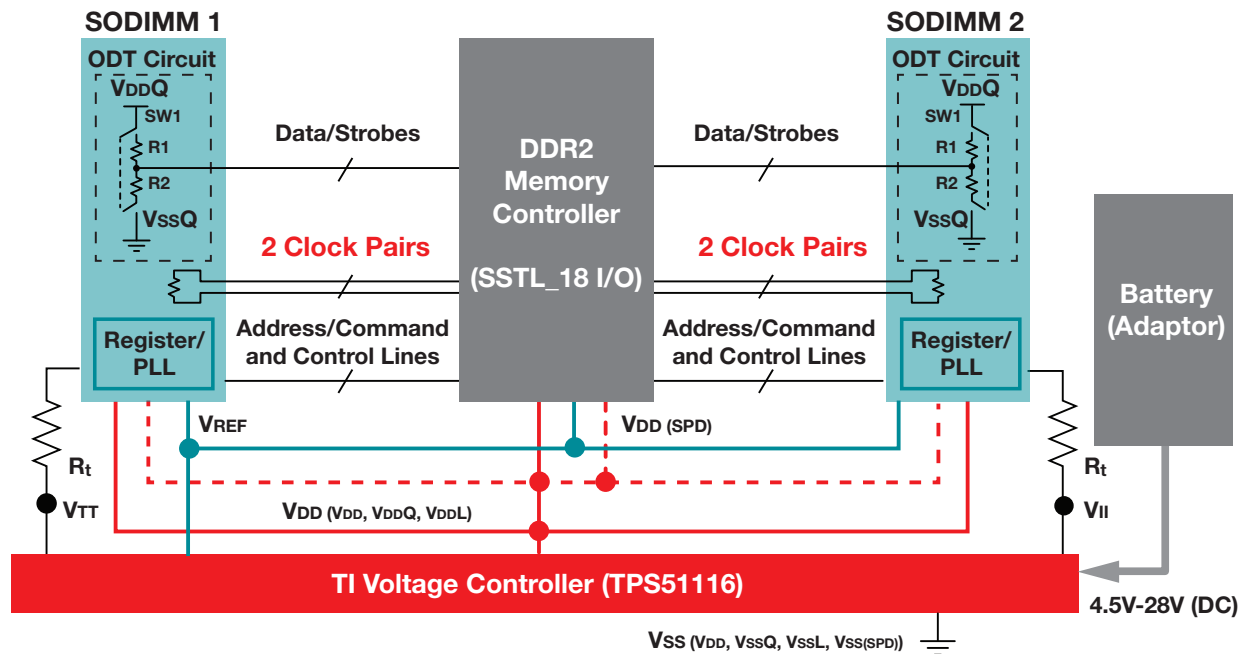
Micron DRAM	Product	DDR	DDR2	DDR3	DDR3L/DDR3L-RS	LPDDR2	RLDRAM® 2	RLDRAM® 3
	Family	MT46	MT47	MT41J	MT41K	MT42	MT49	MT44
	Core Voltage (V)	2.5	1.5	1.5	1.35	1.2	1.8	1.35
	Speed (MHz)	167 to 200	200 to 533	400 to 1066	400 to 1066	400 MHz	300 to 533	800 to 1066
	Width	x8, x16	x8, x16	x8, x16	x8, x16	x16, x32	x18, x36	x18, x36
	Density	256Mb, 512Mb	1Gb, 2Gb	1Gb, 2Gb, 4Gb	1Gb, 2Gb, 4Gb	512Mb, 2Gb, 4Gb	288Mb, 576Mb	576Mb, 1Gb
	Modules	UDIMM, RDIMM, SODIMM				—	—	—
TI DRAM Power Solutions	DDR Core	TPS51116 Output 1	TPS51116 Output 1	TPS51116/216/916 Output 1	TPS51116/216/916 Output 1	TPS51216/916 Output 1	TPS51216/916 Output 1	TPS51216/916 Output 1
	DDR Termination	TPS51116 Output 2	TPS51116 Output 2	TPS51116/216/916 Output 2	TPS51116/216/916 Output 2	TPS51216/916 Output 2	TPS51216/916 Output 2	TPS51216/916 Output 2
		OR	OR	OR	OR	OR	OR	OR
		TPS51100	TPS51100	TPS51200/206 (3A/2A peak LDO)	TPS51200/206 (3A/2A peak LDO)	TPS51200 (3A peak LDO)	TPS51200 (3A peak LDO)	TPS51200 (3A peak LDO)
				OR	OR	OR	OR	OR
				TPS53317 6A (Switcher)	TPS53317 6A (Switcher)	TPS53317 6A (Switcher)	TPS51206 (2A peak LDO)	TPS51206 (2A peak LDO)
								OR
								TPS53317 6A (Switcher)
	Package (mm)							
	MSOP-10 5x3	TPS51100	TPS51100	—	—	—	—	—
	QFN-20 3x3	—	—	TPS51216/916	TPS51216/916	TPS51216/916	TPS51216/916	TPS51216/916
	QFN-20 4x3.5	—	—	TPS53317	TPS53317	TPS53317		TPS53317
	QFN-24 4x4	TPS51116	TPS51116	TPS51116	TPS51116	—	—	—
	SON-10 2x2	—	—	TPS51206	TPS51206	—	TPS51206	TPS51206
	SON-10 3x3	—	—	TPS51200	TPS51200	TPS51200	TPS51200	TPS51200
	TSSOP-20 6.6x6.6	TPS51116	TPS51116	TPS51116	TPS51116	—	—	—
	EVM Available	✓	✓	✓ N/A for TPS51216	✓ N/A for TPS51216	✓ N/A for TPS51216	✓	✓ N/A for TPS51216
	Power Lab Reference Designs (Click below, then type TI P/N www.ti.com/powerlab)	7 (ex. PMP5225)	7	10 (ex. PMP6807)	10 (ex. PMP5922.4)	4 (ex. PMP4742.7)	7 (ex. PMP5783.1)	4 (ex. PMP5922.1)
	Simulation Models	PSpice, TINA	PSpice, TINA	PSpice, TINA, N/A for TPS51216	PSpice, TINA, N/A for TPS51216	PSpice, TINA, N/A for TPS51216	PSpice, TINA	PSpice, TINA, N/A for TPS51216

DDR Power Solutions Quick Selection Guide



Memory Interface Products for DDR

	Product	DDR	DDR2	DDR3	DDR3L/DDR3L-RS
TI DRAM Signal Chain Solutions	Register	—	SN74SSTUB32866 SN74SSTUB32864 74SSTUB32868 74SSTUB32868A 74SSTUB32865 74SSTUB32865A	SN74SSQE32882 SN74SSQEA32882 SN74SSQEB32882 SN74SSQEC32882	SN74SSQE32882 SN74SSQEA32882 SN74SSQEB32882 SN74SSQEC32882
	PLL Clock Driver	CDCV855 CDCV857	CDCUA877 CDCU2A877	—	—



For more information: www.ti.com/clockingsolutions

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