



# Q2' 2010 Databook



# Computing Memory

## DDR3 SDRAM : Component



VDD	DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
1.5V	1Gb	256Mx4	DDR3 1333	H5TQ1G43BFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				H5TQ1G43TFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			DDR3 1066	H5TQ1G43BFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
				H5TQ1G43TFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
		128Mx8	DDR3 1333	H5TQ1G83BFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				H5TQ1G83TFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			DDR3 1066	H5TQ1G83BFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
				H5TQ1G83TFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
	64Mx16	DDR3 1333	H5TQ1G63BFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now		
	64Mx16	DDR3 1066	H5TQ1G63BFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now		
	2Gb	512Mx4	DDR3 1333	H5TQ2G43AFR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				H5TQ2G43BFR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				DDR3 1066	H5TQ2G43AFR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now
					H5TQ2G43BFR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now
256Mx8			DDR3 1333	H5TQ2G83MFR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	EOL	
				H5TQ2G83AFR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				H5TQ2G83BFR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			DDR3 1066	H5TQ2G83MFR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	EOL	
		H5TQ2G83AFR-G7C		FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now		
		H5TQ2G83BFR-G7C		FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now		
128x16		DDR3 1333	H5TQ2G63BFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now		
		DDR3 1066	H5TQ2G63BFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now		
4Gb		1Gx4 (DDP)	DDR3 1333	H5TQ4G43BMR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Jun '10	
			DDR3 1066	H5TQ4G43BMR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Jun '10	
1.35V	1Gb	256Mx4	DDR3 1333	H5TC1G43TFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
			DDR3 1066	H5TC1G43TFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
		128Mx8	DDR3 1333	H5TC1G83TFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
			DDR3 1066	H5TC1G83TFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
		2Gb	512Mx4	DDR3 1333	H5TC2G43AFR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Now
					H5TC2G43BFR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Now
	DDR3 1066			H5TC2G43AFR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Now	
				H5TC2G43BFR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Now	
	256Mx8		DDR3 1333	H5TC2G83AFR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC2G83BFR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Now	
			DDR3 1066	H5TC2G83AFR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Now	
				H5TC2G83BFR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Now	
	4Gb	1Gx4 (DDP)	DDR3 1333	H5TC4G43BMR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Jun '10	
			DDR3 1066	H5TC4G43BMR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Jun '10	



# Computing Memory

## DDR2 SDRAM : Component



VDD	DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
1.8V	2Gb	512Mx4	DDR2 800	H5PS2G43AFR-S6C	FBGA(60ball)	8Bank, 1.8V, CL5,6-6-6	Now	
			DDR2 667	H5PS2G43AFR-Y5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
		256Mx8	DDR2 800	H5PS2G83AFR-S6C	FBGA(60ball)	8Bank, 1.8V, CL5,6-6-6	Now	
			DDR2 667	H5PS2G83AFR-Y5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
	1Gb	256Mx4	DDR2 800	HY5PS1G431CFP-S5	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
				H5PS1G43EFR-S5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
			DDR2 667	HY5PS1G431CFP-Y5	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
				H5PS1G43EFR-Y5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
			DDR2 533	HY5PS1G431CFP-C4	FBGA(60ball)	8Bank, 1.8V, CL4,4-4-4	Now	
				H5PS1G43EFR-C4C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
			DDR2 400	HY5PS1G431CFP-E3	FBGA(60ball)	8Bank, 1.8V, CL3,3-3-3	Now	
			128Mx8	DDR2 800	HY5PS1G831CFP-S5	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
					H5PS1G83EFR-S5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
					H5PS1G83NFR-S5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
				DDR2 667	HY5PS1G831CFP-Y5	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
					H5PS1G83EFR-Y5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
		H5PS1G83NFR-Y5C			FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
		DDR2 533		HY5PS1G831CFP-C4	FBGA(60ball)	8Bank, 1.8V, CL4,4-4-4	Now	
				H5PS1G43EFR-C4C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
				H5PS1G43NFR-C4C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now	
		DDR2 400	HY5PS1G831CFP-E3	FBGA(60ball)	8Bank, 1.8V, CL3,3-3-3	Now		
		64Mx16	DDR2 800	HY5PS1G1631CFP-S5	FBGA(84ball)	8Bank, 1.8V, CL5,5-5-5	Now	
				H5PS1G63EFR-S5C	FBGA(84ball)	8Bank, 1.8V, CL5,5-5-5	Now	
			DDR2 667	HY5PS1G1631CFP-Y5	FBGA(84ball)	8Bank, 1.8V, CL5,5-5-5	Now	
H5PS1G63EFR-Y5C				FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now		
DDR2 533			HY5PS1G1631CFP-C4	FBGA(84ball)	8Bank, 1.8V, CL5,4-4-4	Now		
DDR2 400			HY5PS1G1631CFP-E3	FBGA(84ball)	8Bank, 1.8V, CL5,3-3-3	Now		



# Computing Memory

## DDR3 SDRAM : Module – UBDIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.		
	DENSITY	ORG.									
1.5V	4GB	512Mx64	256Mx8	1333-999	HMT351U6AFR8C-H9	FBGA(82ball)	2	30mm	Now		
					HMT351U6BFR8C-H9	FBGA(82ball)	2	30mm	Now		
				1066-777	HMT351U6AFR8C-G7	FBGA(82ball)	2	30mm	Now		
					HMT351U6BFR8C-G7	FBGA(82ball)	2	30mm	Now		
		512Mx72	256Mx8	1333-999	HMT351U7AFR8C-H9	FBGA(82ball)	2	30mm	Now		
					HMT351U7BFR8C-H9	FBGA(82ball)	2	30mm	Now		
				1066-777	HMT351U7AFR8C-G7	FBGA(82ball)	2	30mm	Now		
					HMT351U7BFR8C-G7	FBGA(82ball)	2	30mm	Now		
	2GB	256Mx64	128Mx8	1333-999	HMT125U6BFR8C-H9	FBGA(78ball)	2	30mm	Now		
					HMT125U6TFR8C-H9	FBGA(78ball)	2	30mm	Now		
				1066-777	HMT125U6BFR8C-G7	FBGA(78ball)	2	30mm	Now		
					HMT125U6TFR8C-G7	FBGA(78ball)	2	30mm	Now		
			800-666	HMT125U6BFR8C-S6	FBGA(78ball)	2	30mm	Now			
				HMT125U6TFR8C-S6	FBGA(78ball)	2	30mm	Now			
				256Mx8	128Mx8	1333-999	HMT325U6BFR8C-H9	FBGA(82ball)	1	30mm	Now
						1066-777	HMT325U6BFR8C-G7	FBGA(82ball)	1	30mm	Now
		256Mx72	128Mx8	1333-999	HMT125U7BFR8C-H9	FBGA(78ball)	2	30mm	Now		
					HMT125U7TFR8C-H9	FBGA(78ball)	2	30mm	Now		
				1066-777	HMT125U7BFR8C-G7	FBGA(78ball)	2	30mm	Now		
					HMT125U7TFR8C-G7	FBGA(78ball)	2	30mm	Now		
			800-666	HMT125U7BFR8C-S6	FBGA(78ball)	2	30mm	Now			
				HMT125U7TFR8C-S6	FBGA(78ball)	2	30mm	Now			
				256Mx8	128Mx8	1333-999	HMT325U7BFR8C-H9	FBGA(82ball)	1	30mm	Now
						1066-777	HMT325U7BFR8C-G7	FBGA(82ball)	1	30mm	Now
1GB	128Mx64	128Mx8	1333-999	HMT112U6BFR8C-H9	FBGA(78ball)	1	30mm	Now			
				HMT112U6TFR8C-H9	FBGA(78ball)	1	30mm	Now			
			1066-777	HMT112U6BFR8C-G7	FBGA(78ball)	1	30mm	Now			
				HMT112U6TFR8C-G7	FBGA(78ball)	1	30mm	Now			
		800-666	HMT112U6BFR8C-S6	FBGA(78ball)	1	30mm	Now				
			HMT112U6TFR8C-S6	FBGA(78ball)	1	30mm	Now				
	128Mx72		128Mx8	1333-999	HMT112U7BFR8C-H9	FBGA(78ball)	1	30mm	Now		
					HMT112U7TFR8C-H9	FBGA(78ball)	1	30mm	Now		
	1066-777	128Mx72	128Mx8	1333-999	HMT112U7BFR8C-G7	FBGA(78ball)	1	30mm	Now		
					HMT112U7TFR8C-G7	FBGA(78ball)	1	30mm	Now		
		800-666	128Mx72	128Mx8	1333-999	HMT112U7BFR8C-S6	FBGA(78ball)	1	30mm	Now	
						HMT112U7TFR8C-S6	FBGA(78ball)	1	30mm	Now	
1066-777			128Mx72	128Mx8	1333-999	HMT112U7BFR8A-H9	FBGA(82ball)	2	30mm	Now	
						HMT112U7TFR8A-H9	FBGA(82ball)	2	30mm	Now	
1.35V	4GB	512Mx72	256Mx8	1333-999	HMT351U7AFR8A-H9	FBGA(82ball)	2	30mm	Now		
					HMT351U7BFR8A-H9	FBGA(82ball)	2	30mm	Now		
				1066-777	HMT351U7AFR8A-G7	FBGA(82ball)	2	30mm	Now		
					HMT351U7BFR8A-G7	FBGA(82ball)	2	30mm	Now		
	2GB	256Mx72	256Mx8	1333-999	HMT325U7BFR8A-H9	FBGA(82ball)	1	30mm	Now		
					HMT325U7BFR8A-G7	FBGA(82ball)	1	30mm	Now		
	2GB	256Mx72	128Mx8	1333-999	HMT125U7BFR8A-H9	FBGA(78ball)	2	30mm	Now		
					HMT125U7TFR8A-H9	FBGA(78ball)	2	30mm	Now		
				1066-777	HMT125U7BFR8A-G7	FBGA(78ball)	2	30mm	Now		
					HMT125U7TFR8A-G7	FBGA(78ball)	2	30mm	Now		
	1GB	128Mx72	128Mx8	1333-999	HMT112U7BFR8A-H9	FBGA(78ball)	1	30mm	Now		
					HMT112U7TFR8A-H9	FBGA(78ball)	1	30mm	Now		
1066-777				HMT112U7BFR8A-G7	FBGA(78ball)	1	30mm	Now			
				HMT112U7TFR8A-G7	FBGA(78ball)	1	30mm	Now			



# Computing Memory

## DDR3 SDRAM : Module – RDIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.				
	DENSITY	ORG.											
1.5V	16GB	2Gx72	1Gx4 (DDP)	1333-999	HMT42GR7BMR4C-H9	FBGA(82ball)	4	30mm	Jun' 10				
				1066-777	HMT42GR7AMR4C-G7	FBGA(82ball)	4	30mm	Now				
					HMT42GR7BMR4C-G7	FBGA(82ball)	4	30mm	Jun' 10				
	8GB	1Gx72	512Mx4		1333-999	HMT31GR7AFR4C-H9	FBGA(82ball)	2	30mm	Now			
						HMT31GR7BFR4C-H9	FBGA(82ball)	2	30mm	Now			
					1066-777	HMT31GR7AFR4C-G7	FBGA(82ball)	2	30mm	Now			
			256Mx8		1333-999	HMT31GR7BFR4C-G7	FBGA(82ball)	2	30mm	Now			
						HMT31GR7BFR8C-H9	FBGA(82ball)	4	30mm	Now			
					1066-777	HMT31GR7AFR8C-G7	FBGA(82ball)	4	30mm	Now			
	4GB	512Mx72	256Mx8		1333-999	HMT351R7AFR8C-H9	FBGA(82ball)	2	30mm	Now			
						HMT351R7BFR8C-H9	FBGA(82ball)	2	30mm	Now			
					1066-777	HMT351R7AFR8C-G7	FBGA(82ball)	2	30mm	Now			
			512Mx4		1333-999	HMT351R7BFR8C-G7	FBGA(82ball)	2	30mm	Now			
						HMT351R7AFR4C-H9	FBGA(82ball)	1	30mm	Now			
					1066-777	HMT351R7BFR4C-H9	FBGA(82ball)	1	30mm	Now			
			128Mx8		1333-999		HMT351R7AFR4C-G7	FBGA(82ball)	1	30mm	Now		
								HMT351R7BFR4C-G7	FBGA(82ball)	1	30mm	Now	
							1066-777	HMT351R7AFR4C-H9	FBGA(82ball)	4	30mm	Now	
					256Mx4		1066-777	HMT351R7BFR4C-H9	FBGA(82ball)	4	30mm	Now	
								HMT151R7TFR8C-H9	FBGA(78ball)	4	30mm	Now	
							1333-999	HMT151R7BFR8C-G7	FBGA(78ball)	4	30mm	Now	
			2GB	256Mx72	256Mx8		1333-999	HMT151R7TFR8C-G7	FBGA(78ball)	4	30mm	Now	
								HMT151R7BFR8C-H9	FBGA(78ball)	2	30mm	Now	
							1066-777	HMT151R7TFR8C-H9	FBGA(78ball)	2	30mm	Now	
					256Mx4		1066-777	HMT151R7BFR4C-G7	FBGA(78ball)	2	30mm	Now	
								HMT151R7TFR4C-G7	FBGA(78ball)	2	30mm	Now	
							1333-999	HMT325R7BFR8C-H9	FBGA(82ball)	1	30mm	Now	
	1GB	128Mx72	128Mx8		1066-777	HMT325R7BFR8C-G7	FBGA(82ball)	1	30mm	Now			
						HMT125R7TFR4C-H9	FBGA(78ball)	1	30mm	Now			
					1333-999	HMT125R7BFR4C-H9	FBGA(78ball)	1	30mm	Now			
			128Mx8		1066-777	HMT125R7TFR4C-G7	FBGA(78ball)	1	30mm	Now			
						HMT125R7BFR8C-H9	FBGA(78ball)	1	30mm	Now			
					1333-999	HMT125R7TFR8C-H9	FBGA(78ball)	1	30mm	Now			
			1GB	128Mx72	128Mx8		1066-777	HMT125R7BFR8C-G7	FBGA(78ball)	1	30mm	Now	
								HMT125R7TFR8C-G7	FBGA(78ball)	1	30mm	Now	
							1333-999	HMT112R7BFR8C-H9	FBGA(78ball)	1	30mm	Now	
1GB					128Mx72	128Mx8		1066-777	HMT112R7TFR8C-H9	FBGA(78ball)	1	30mm	Now
									HMT112R7BFR8C-G7	FBGA(78ball)	1	30mm	Now
								1333-999	HMT112R7TFR8C-G7	FBGA(78ball)	1	30mm	Now
1.35V	16GB	2Gx72	1Gx4 (DDP)	1066-777	HMT42GR7AMR4A-G7	FBGA(82ball)	4	30mm	Now				
					HMT42GR7BMR4A-G7	FBGA(82ball)	4	30mm	Jul' 10				
	8GB	1Gx72	512Mx4		1333-999	HMT31GR7AFR4A-H9	FBGA(82ball)	2	30mm	Now			
						HMT31GR7BFR4A-H9	FBGA(82ball)	2	30mm	Now			
					1066-777	HMT31GR7AFR4A-G7	FBGA(82ball)	2	30mm	Now			
			256Mx8		1066-777	HMT31GR7BFR4A-G7	FBGA(82ball)	2	30mm	Now			
						HMT31GR7AFR8A-G7	FBGA(82ball)	4	30mm	Now			
						HMT31GR7BFR8A-G7	FBGA(82ball)	4	30mm	Now			
	4GB	512Mx72	256Mx8		1333-999	HMT351R7AFR8A-H9	FBGA(82ball)	2	30mm	Now			
						HMT351R7BFR8A-H9	FBGA(82ball)	2	30mm	Now			
					1066-777	HMT351R7AFR8A-G7	FBGA(82ball)	2	30mm	Now			
			128Mx8		1066-777	HMT351R7BFR8A-G7	FBGA(82ball)	2	30mm	Now			
						HMT151R7TFR8A-G7	FBGA(78ball)	4	30mm	Now			
					1333-999	HMT151R7TFR4A-H9	FBGA(78ball)	2	30mm	Now			
			256Mx4		1066-777	HMT151R7BFR4A-G7	FBGA(78ball)	2	30mm	Now			
						HMT151R7TFR4A-G7	FBGA(78ball)	2	30mm	Now			
					1333-999	HMT325R7AFR8A-H9	FBGA(82ball)	1	30mm	Now			
	2GB	256Mx72	256Mx8		1066-777	HMT325R7BFR8A-H9	FBGA(82ball)	1	30mm	Now			
						HMT325R7AFR8A-G7	FBGA(82ball)	1	30mm	Now			
						HMT325R7BFR8A-G7	FBGA(82ball)	1	30mm	Now			
			256Mx4		1333-999	HMT125R7TFR4A-H9	FBGA(78ball)	1	30mm	Now			
						HMT125R7TFR4A-G7	FBGA(78ball)	1	30mm	Now			
					1066-777	HMT125R7TFR8A-H9	FBGA(78ball)	1	30mm	Now			
			128Mx8		1066-777	HMT125R7BFR8A-G7	FBGA(78ball)	1	30mm	Now			
						HMT125R7TFR8A-G7	FBGA(78ball)	1	30mm	Now			
					1333-999	HMT112R7TFR8A-H9	FBGA(78ball)	1	30mm	Now			
			128Mx8		1066-777	HMT112R7BFR8A-G7	FBGA(78ball)	1	30mm	Now			
						HMT112R7TFR8A-G7	FBGA(78ball)	1	30mm	Now			
					1333-999	HMT112R7TFR8A-H9	FBGA(78ball)	1	30mm	Now			



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.			
	DENSITY	ORG.										
1.5V	8GB	1Gx72	1Gx4 (DDP)	1333-999	HMT41GV7AMR4C-H9	FBGA(82ball)	2	18.75mm	Now			
					HMT41GV7BMR4C-H9	FBGA(82ball)	2	18.75mm	Jun '10			
				1066-777	HMT41GV7AMR4C-G7	FBGA(82ball)	2	18.75mm	Now			
				HMT41GV7BMR4C-G7	FBGA(82ball)	2	18.75mm	Jun '10				
			512Mx8 (DDP)	1333-999	HMT41GV7AMR8C-H9	FBGA(82ball)	4	18.75mm	Now			
					HMT41GV7BMR8C-H9	FBGA(82ball)	4	18.75mm	Jun '10			
				1066-777	HMT41GV7AMR8C-G7	FBGA(82ball)	4	18.75mm	Now			
				HMT41GV7BMR8C-G7	FBGA(82ball)	4	18.75mm	Jun '10				
	4GB	512Mx72	512Mx4 (DDP)	1333-999	HMT351V7BMR4C-H9	FBGA(78ball)	2	18.75mm	Now			
					HMT351V7TMR4C-H9	FBGA(78ball)	2	18.75mm	Now			
				1066-777	HMT351V7BMR4C-G7	FBGA(78ball)	2	18.75mm	Now			
				HMT351V7TMR4C-G7	FBGA(78ball)	2	18.75mm	Now				
			256Mx8	1333-999	HMT351V7AFR8C-H9	FBGA(82ball)	2	18.75mm	Now			
					HMT351V7BFR8C-H9	FBGA(82ball)	2	18.75mm	Now			
				1066-777	HMT351V7AFR8C-G7	FBGA(82ball)	2	18.75mm	Now			
				HMT351V7BFR8C-G7	FBGA(82ball)	2	18.75mm	Now				
	2GB	256Mx72	256Mx4	1333-999	HMT125V7BFR4C-H9	FBGA(78ball)	1	18.75mm	Now			
					HMT125V7TFR4C-H9	FBGA(78ball)	1	18.75mm	Now			
					1066-777	HMT125V7BFR4C-G7	FBGA(78ball)	1	18.75mm	Now		
				128Mx8	1333-999	HMT125V7BFR8C-H9	FBGA(78ball)	2	18.75mm	Now		
HMT125V7TFR8C-H9						FBGA(78ball)	2	18.75mm	Now			
1066-777					HMT125V7BFR8C-G7	FBGA(78ball)	2	18.75mm	Now			
256Mx8			1333-999	HMT125V7TFR8C-G7	FBGA(78ball)	2	18.75mm	Now				
				1066-777	HMT325V7BFR8C-H9	FBGA(82ball)	1	18.75mm	Now			
			HMT325V7BFR8C-G7	FBGA(82ball)	1	18.75mm	Now					
1GB			128Mx72	128Mx8	1333-999	HMT112V7BFR8C-H9	FBGA(78ball)	1	18.75mm	Now		
						HMT112V7TFR8C-H9	FBGA(78ball)	1	18.75mm	Now		
						1066-777	HMT112V7BFR8C-G7	FBGA(78ball)	1	18.75mm	Now	
	1066-777	HMT112V7TFR8C-G7			FBGA(78ball)	1	18.75mm	Now				
		1.35V			8GB	1Gx4 (DDP)	1333-999	HMT41GV7AMR4A-H9	FBGA(82ball)	2	18.75mm	Now
								HMT41GV7BMR4A-H9	FBGA(82ball)	2	18.75mm	Jul '10
1066-777	HMT41GV7AMR4A-G7		FBGA(82ball)	2			18.75mm	Now				
HMT41GV7BMR4A-G7	FBGA(82ball)		2	18.75mm			Jul '10					
512Mx8 (DDP)	1333-999		HMT41GV7BMR8A-H9	FBGA(82ball)		4	18.75mm	Jul '10				
			HMT41GV7BMR8A-G7	FBGA(82ball)		4	18.75mm	Jul '10				
	1066-777	HMT351V7TMR4A-H9	FBGA(78ball)	2		18.75mm	Now					
		HMT351V7TMR4A-G7	FBGA(78ball)	2		18.75mm	Now					
4GB	512Mx72	512Mx4 (DDP)	1333-999	HMT351V7TMR4A-H9	FBGA(78ball)	2	18.75mm	Now				
				1066-777	HMT351V7TMR4A-G7	FBGA(78ball)	2	18.75mm	Now			
			256Mx8	1333-999	HMT351V7AFR8A-H9	FBGA(82ball)	2	18.75mm	Now			
					HMT351V7BFR8A-H9	FBGA(82ball)	2	18.75mm	May '10			
		1066-777		HMT351V7AFR8A-G7	FBGA(82ball)	2	18.75mm	Now				
				HMT351V7BFR8A-G7	FBGA(82ball)	2	18.75mm	May '10				
		2GB	256Mx72	256Mx4	1333-999	HMT125V7TFR4A-H9	FBGA(78ball)	1	18.75mm	Now		
						1066-777	HMT125V7TFR4A-G7	FBGA(78ball)	1	18.75mm	Now	
128Mx8	1333-999				HMT125V7TFR8A-H9	FBGA(78ball)	2	18.75mm	Now			
				1066-777	HMT125V7TFR8A-G7	FBGA(78ball)	2	18.75mm	Now			
	256Mx8			1333-999	HMT325V7BFR8A-H9	FBGA(82ball)	1	18.75mm	May '10			
1066-777				HMT325V7BFR8A-G7	FBGA(82ball)	1	18.75mm	May '10				
1GB	128Mx72	128Mx8	1333-999	HMT112V7TFR8A-H9	FBGA(78ball)	1	18.75mm	Now				
			1066-777	HMT112V7TFR8A-G7	FBGA(78ball)	1	18.75mm	Now				



# omputing Memory

## DDR3 SDRAM : Module – SODIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.		
	DENSITY	ORG.									
1.5V	4GB	512Mx64	256Mx8	1333--999	HMT351S6AFR8C-H9	FBGA(82ball)	2	30mm	Now		
					HMT351S6BFR8C-H9	FBGA(82ball)	2	30mm	Now		
				1066-777	HMT351S6AFR8C-G7	FBGA(82ball)	2	30mm	Now		
					HMT351S6BFR8C-G7	FBGA(82ball)	2	30mm	Now		
	2GB	256Mx64	128Mx8	1333-999	HMT125S6BFR8C-H9	FBGA(78ball)	2	30mm	Now		
					HMT125S6TFR8C-H9	FBGA(78ball)	2	30mm	Now		
					1066-777	HMT125S6BFR8C-G7	FBGA(78ball)	2	30mm	Now	
						HMT125S6TFR8C-G7	FBGA(78ball)	2	30mm	Now	
				800-666	HMT125S6BFR8C-S6	FBGA(78ball)	2	30mm	Now		
					HMT125S6TFR8C-S6	FBGA(78ball)	2	30mm	Now		
				1333-999	HMT325S6BFR8C-H9	FBGA(82ball)	1	30mm	Now		
					HMT325S6BFR8C-G7	FBGA(82ball)	1	30mm	Now		
	128Mx16	1333-999	HMT325S6BFR6C-H9	FBGA(96ball)	2	30mm	Now				
			HMT325S6BFR6C-G7	FBGA(96ball)	2	30mm	Now				
1GB	128Mx64	128Mx8	1333-999	HMT112S6TFR8C-H9	FBGA(78ball)	1	30mm	Now			
				1066-777	HMT112S6TFP8C-G7	FBGA(78ball)	1	30mm	Now		
					HMT112S6TFP8C-S6	FBGA(78ball)	1	30mm	Now		
			128Mx64	64Mx16	1333-999	HMT112S6BFR6C-H9	FBGA(96ball)	2	30mm	Now	
						1066-777	HMT112S6BFR6C-G7	FBGA(96ball)	2	30mm	Now
							HMT112S6BFR6C-S6	FBGA(96ball)	2	30mm	Now
	128Mx16	1333-999	HMT312S6BFR6C-H9	FBGA(96ball)	1	30mm	Now				
				HMT312S6BFR6C-G7	FBGA(96ball)	1	30mm	Now			
			1066-777	HMT312S6BFR6C-G7	FBGA(96ball)	1	30mm	Now			
					FBGA(96ball)	1	30mm	Now			
1.35V	4GB	512Mx64	256Mx8	1333--999	HMT351S6BFR8A-H9	FBGA(82ball)	2	30mm	May '10		
				1066-777	HMT351S6BFR8A-G7	FBGA(82ball)	2	30mm	May '10		
	2GB	256Mx64	256Mx8	1333-999	HMT325S6BFR8A-H9	FBGA(82ball)	1	30mm	May '10		
				1066-777	HMT325S6BFR8A-G7	FBGA(82ball)	1	30mm	May '10		



# Computing Memory

## DDR2 SDRAM : Module – UBDIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.
	DENSITY	ORG.							
1.8V	4GB	512Mx64	256Mx8	DDR2 800-666	HMP351U6AFR8C-S6	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HMP351U6AFR8C-Y5	FBGA(60ball)	2	30mm	Now
		512Mx72	256Mx8	DDR2 800-666	HMP351U7AFR8C-S6	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HMP351U7AFR8C-Y5	FBGA(60ball)	2	30mm	Now
	2GB	256Mx64	128Mx8	DDR2 800-555	HYMP125U64CP8-S5	FBGA(60ball)	2	30mm	Now
					HMP125U6EFR8C-S5	FBGA(60ball)	2	30mm	Now
				DDR2 800-666	HMP125U6NFR8C-S6	FBGA(60ball)	2	30mm	Now
					HYMP125U64CP8-Y5	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HMP125U6EFR8C-Y5	FBGA(60ball)	2	30mm	Now
					HMP125U6NFR8C-Y5	FBGA(60ball)	2	30mm	Now
				DDR2 533-444	HYMP125U64CP8-C4	FBGA(60ball)	2	30mm	Now
					HMP125U6EFR8C-C4	FBGA(60ball)	2	30mm	Now
		HMP125U6NFR8C-C4	FBGA(60ball)		2	30mm	Now		
		256Mx72	128Mx8	DDR2 800-555	HYMP125U72CP8-S5	FBGA(60ball)	2	30mm	Now
DDR2 667-555	HYMP125U72CP8- Y5			FBGA(60ball)	2	30mm	Now		
1GB	128Mx64	128Mx8	DDR2 800-555	HYMP112U64CP8-S5	FBGA(60ball)	1	30mm	Now	
				HMP112U6EFR8C-S5	FBGA(60ball)	1	30mm	Now	
			DDR2 800-666	HMP112U6NFR8C-S6	FBGA(60ball)	1	30mm	Now	
				DDR2 667-555	HYMP112U64CP8-Y5	FBGA(60ball)	1	30mm	Now
			HMP112U6EFR8C-Y5	FBGA(60ball)	1	30mm	Now		
				HMP112U6NFR8C-Y5	FBGA(60ball)	1	30mm	Now	
			DDR2 533-444	HYMP112U64CP8-C4	FBGA(60ball)	1	30mm	Now	
				HMP112U6EFR8C-C4	FBGA(60ball)	1	30mm	Now	
	HMP112U6NFR8C-C4	FBGA(60ball)		1	30mm	Now			
	128Mx72	128Mx8	DDR2 800-555	HYMP112U72CP8-S5	FBGA(60ball)	1	30mm	Now	
DDR2 667-555			HYMP112U72CP8-Y5	FBGA(60ball)	1	30mm	Now		





# Computing Memory

## DDR2 SDRAM : Module – RDIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.
	DENSITY	ORG.							
1.8V	8GB	1Gx72	512Mx4	DDR2 800-666	HMP31GP7AFR4C-S6	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HMP31GP7AFR4C-Y5	FBGA(60ball)	2	30mm	Now
	4GB	512Mx72	256Mx4	DDR2 800-555	HYMP151P72CP4-S5	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HYMP151P72CP4-Y5	FBGA(60ball)	2	30mm	Now
	2GB	256Mx72	128MX8	DDR2 800-555	HYMP125P72CP8-S5	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HYMP125P72CP8-Y5	FBGA(60ball)	2	30mm	Now
			256MX4	DDR2 800-555	HYMP125P72CP4-S5	FBGA(60ball)	1	30mm	Now
				DDR2 667-555	HYMP125P72CP4-Y5	FBGA(60ball)	1	30mm	Now
			128Mx8	DDR2 667-555	HYMP112P72CP8-Y5	FBGA(60ball)	1	30mm	Now



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.
	DENSITY	ORG.							
1.8V	4GB	512Mx72	256x4(DDP)	DDR2 667-555	HYMP351P72CMP4L-Y5	FBGA(63ball)	2	18.3mm	Now
	2GB	256Mx72	256MX4	DDR2 800-555	HYMP125P72CP4L-S5	FBGA(60ball)	2	18.3mm	Now
				DDR2 667-555	HYMP125P72CP4L-Y5	FBGA(60ball)	2	18.3mm	Now
	1GB	128Mx72	128Mx8	DDR2 800-555	HYMP112P72CP8L-S5	FBGA(60ball)	1	18.3mm	Now
				DDR2 667-555	HYMP112P72CP8L-Y5	FBGA(60ball)	1	18.3mm	Now



# Computing Memory

## DDR2 SDRAM : Module – FBDIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.
	DENSITY	ORG.							
1.8V	8GB	1Gx72	512Mx4	DDR2 800-666	HMP31GF7AFR4C-S6xx	FBGA(60ball)	2	30.35mm	Now
				DDR2 667-555	HMP31GF7AFR4C-Y5xx	FBGA(60ball)	2	30.35mm	Now
	4GB	512Mx72	256Mx4	DDR2 800-555	HYMP151F72CP4xx-S5	FBGA(60ball)	2	30.35mm	Now
				DDR2 667-555	HYMP151F72CP4xx-Y5	FBGA(60ball)	2	30.35mm	Now
			128Mx8	DDR2 800-555	HYMP151F72CP8xx-S5	FBGA(60ball)	4	30.35mm	Now
				DDR2 667-555	HYMP151F72CP8xx-Y5	FBGA(60ball)	4	30.35mm	Now
	2GB	256Mx72	128MX8	DDR2 800-555	HYMP125F72CP8xx-S5	FBGA(60ball)	2	30.35mm	Now
				DDR2 667-555	HYMP125F72CP8xx-Y5	FBGA(60ball)	2	30.35mm	Now
1GB	128Mx72	128Mx8	DDR2 800-555	HYMP112F72CP8xx-S5	FBGA(60ball)	1	30.35mm	Now	
		128Mx8	DDR2 667-555	HYMP112F72CP8xx-Y5	FBGA(60ball)	1	30.35mm	Now	
1.55V	8GB	1Gx72	512Mx4	DDR2 667-555	HMP31GL7AFR4C-Y5xx	FBGA(60ball)	2	30.35mm	Now
	4GB	512Mx72	256Mx4	DDR2 667-555	HYMP151L72CP4xx-Y5	FBGA(60ball)	2	30.35mm	Now
	2GB	256Mx72	128MX8	DDR2 667-555	HYMP125L72CP8xx-Y5	FBGA(60ball)	2	30.35mm	Now
	1GB	128Mx72	128Mx8	DDR2 667-555	HYMP112L72CP8xx-Y5	FBGA(60ball)	1	30.35mm	Now

**FBD P/N xx : (AMB vender)(Revision)**

**AMB vender N: intel, D: IDT, E NEC**



# Computing Memory

## DDR2 SDRAM : Module – SODIMM



VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.	
	DENSITY	ORG.								
1.8V	4GB	512Mx64	256Mx8	DDR2 800-666	HMP351S6AFR8C-S6	FBGA(60ball)	2	30mm	Now	
				DDR2 667-555	HMP351S6AFR8C-Y5	FBGA(60ball)	2	30mm	Now	
				DDR2 533-444	HMP351S6AFR8C-C4	FBGA(60ball)	2	30mm	Now	
	2GB	256Mx64	128Mx8	DDR2 800-555	HYMP125S64CP8-S5	FBGA(60ball)	2	30mm	Now	
					HMP125S6EFR8C-S5	FBGA(60ball)	2	30mm	Now	
				DDR2 800-666	HMP125S6NFR8C-S6	FBGA(60ball)	2	30mm	Now	
					DDR2 667-555	HYMP125S64CP8-Y5	FBGA(60ball)	2	30mm	Now
						HMP125S6EFR8C-Y5	FBGA(60ball)	2	30mm	Now
				DDR2 533-444	HMP125S6NFR8C-Y5	FBGA(60ball)	2	30mm	Now	
					HYMP125S64CP8-C4	FBGA(60ball)	2	30mm	Now	
					HMP125S6EFR8C-C4	FBGA(60ball)	2	30mm	Now	
				1GB	128Mx64	64Mx16	DDR2 800-555	HYMP112S64CP6-S5	FBGA(84ball)	2
	HMP112S6EFR6C-S5	FBGA(84ball)	2					30mm	Now	
	DDR2 667-555	HYMP112S64CP6-Y5	FBGA(84ball)				2	30mm	Now	
		HMP112S6EFR6C-Y5	FBGA(84ball)				2	30mm	Now	
DDR2 533-444	HYMP112S64CP6-C4	FBGA(84ball)	2				30mm	Now		
	HMP112S6EFR6C-C4	FBGA(84ball)	2				30mm	Now		



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
256Mb	32M x 8	166MHz	HY57V56820F(L)TP-6(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			H57V2582GTR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
		133MHz	HY57V56820F(L)TP-H(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			H57V2582GTR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
	16M x 16	200MHz	HY57V561620F(L)TP-5(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			H57V2562GTR-50C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
		166MHz	HY57V561620F(L)TP-6(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			H57V2562GTR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
			HY5V56FFP-6	FBGA(54ball)	4Bank,3.3V	EOL	
			H57V2562GFR-60C(I/L)	FBGA(54ball)	4Bank,3.3V	Now	
		143MHz	HY57V561620F(L)TP-7(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			H57V2562GTR-70C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
			HY5V56FFP-7	FBGA(54ball)	4Bank,3.3V	EOL	
			H57V2562GFR-70C(I/L)	FBGA(54ball)	4Bank,3.3V	Now	
		133MHz	HY57V561620F(L)TP-H(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			H57V2562GTR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
			HY5V56FFP-H	FBGA(54ball)	4Bank,3.3V	EOL	
			H57V2562GFR-75C(I/L)	FBGA(54ball)	4Bank,3.3V	Now	
		8M x 32	166MHz	HY5V52AFP-6	FBGA(90ball)	4Bank,3.3V	EOL
				H57V2622GMR-60C	FBGA(90ball)	4Bank,3.3V	Now
	133MHz		HY5V52AFP-H	FBGA(90ball)	4Bank,3.3V	EOL	
			H57V2622GMR-75C	FBGA(90ball)	4Bank,3.3V	Now	
	128Mb	8M x 16	200MHz	HY5V26E(L/S)FP-5	FBGA(54ball)	4Bank,3.3V	EOL
				HY57V281620F(L)TP-5(I)	TSOPII(54pin)	4Bank,3.3V	EOL
H57V1262GTR-50C(I/L)				TSOPII(54pin)	4Bank,3.3V	Now	
H57V1262GFR-50C(I/L)				FBGA(54ball)	4Bank,3.3V	Now	
166MHz			HY57V281620F(L)TP-6(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			HY5V26F(L/S)FP-6	FBGA(54ball)	4Bank,3.3V	EOL	
			H57V1262GTR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
			H57V1262GFR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
143MHz			HY57V281620F(L)TP-7(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			HY5V26F(L/S)FP-7	FBGA(54ball)	4Bank,3.3V	EOL	
			H57V1262GTR-70C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
			H57V1262GFR-70C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
133MHz			HY57V281620F(L)TP-H(I)	TSOPII(54pin)	4Bank,3.3V	EOL	
			HY5V26F(L/S)FP-H	FBGA(54ball)	4Bank,3.3V	EOL	
			H57V1262GTR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
			H57V1262GFR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now	
64Mb	4M x 16	200MHz	HY57V641620F(L/S)TP-5(I)	TSOP-II(54pin)	4 Bank, 3.3V	EOL	
		166MHz	HY57V641620F(L/S)TP-6(I)	TSOP-II(54pin)	4 Bank, 3.3V	EOL	
			HY5V66FFP-6	FBGA(54ball)	4 Bank, 3.3V	EOL	
			HY5V66FFP-6	FBGA(60ball)	4 Bank, 3.3V	EOL	

\* All SDR DRAM is Available For IT-Part



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
512Mb	64MX8	DDR 500	HY5DU12822D(L)TP-4(I)	TSOPII(66pin)	4Bank,2.6V, 3-3-3	EOL	
			HY5DU12822D(L)FP-4(I)	FBGA(60ball)	4Bank,2.6V, 3-3-3	EOL	
		DDR 400	HY5DU12822D(L)TP-D43(I)	TSOPII(66pin)	4Bank,2.6V, 3-3-3	EOL	
			HY5DU12822D(L)FP-D43(I)	FBGA(60ball)	4Bank,2.6V, 3-3-3	EOL	
			H5DU5182ETR-E3C(I/L)	TSOPII(66pin)	4Bank,2.6V, 3-3-3	Now	
			H5DU5182EFR-E3C(I/L)	FBGA(60ball)	4Bank,2.6V, 3-3-3	Now	
		DDR 333	HY5DU12822D(L)TP-J(I)	TSOPII(66pin)	4Bank,2.5V, CL2.5	EOL	
			HY5DU12822D(L)FP-J(I)	FBGA(60ball)	4Bank,2.5V, CL2.5	EOL	
			H5DU5182ETR-J3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			H5DU5182EFR-J3C(I/L)	FBGA(60ball)	4Bank, 2.5V, CL2.5	Now	
		DDR 266	HY5DU12822D(L)TP-H(I)	TSOPII(66pin)	4Bank,2.5V, CL2.5	EOL	
			HY5DU12822D(L)FP-H(I)	FBGA(60ball)	4Bank,2.5V, CL2.5	EOL	
	H5DU5182ETR-K3C(I/L)		TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now		
	H5DU5182EFR-K3C(I/L)		FBGA(60ball)	4Bank, 2.5V, CL2.5	Now		
	32MX16	DDR 400	HY5DU121622D(L)TP-D43(I)	TSOPII(66pin)	4Bank,2.6V, 3-3-3	EOL	
			HY5DU121622D(L)FP-D43(I)	FBGA(60ball)	4Bank,2.6V, 3-3-3	EOL	
			H5DU5162ETR-E3C(I/L)	TSOPII(66pin)	4Bank,2.6V, 3-3-3	Now	
			H5DU5162EFR-E3C(I/L)	FBGA(60ball)	4Bank,2.6V, 3-3-3	Now	
		DDR 333	HY5DU121622D(L)TP-J(I)	TSOPII(66pin)	4Bank,2.5V, CL2.5	EOL	
			HY5DU121622D(L)FP-J(I)	FBGA(60ball)	4Bank,2.5V, CL2.5	EOL	
			H5DU5162ETR-J3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			H5DU5162EFR-J3C(I/L)	FBGA(60ball)	4Bank, 2.5V, CL2.5	Now	
		DDR 266	HY5DU121622D(L)TP-H(I)	TSOPII(66pin)	4Bank,2.5V, CL2.5	EOL	
			HY5DU121622D(L)FP-H(I)	FBGA(60ball)	4Bank,2.5V, CL2.5	EOL	
H5DU5162ETR-K3C(I/L)			TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now		
H5DU5162EFR-K3C(I/L)			FBGA(60ball)	4Bank, 2.5V, CL2.5	Now		
256Mb	32Mx8	DDR 500	HY5DU56822F(L)TP-4(I)	FBGA(60ball)	4Bank, 2.6V, 3-3-3	EOL	
			HY5DU56822F(L)TP-D43(I)	TSOPII(66pin)	4Bank, 2.6V, 3-3-3	EOL	
		DDR 400	H5DU2582GTR-E3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, 3-3-3	Now	
			HY5DU56822F(L)TP-J(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL	
		DDR 333	H5DU2582GTR-J3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			HY5DU56822F(L)TP-H(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL	
		DDR 266	H5DU2582GTR-K3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			HY5DU56822F(L)TP-H(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL	
	16Mx16	DDR 500	HY5DU561622F(L)TP-4(I)	TSOPII(66pin)	4Bank, 2.6V, 4-5-5	EOL	
			HY5DU561622F(L)FP-4(I)	FBGA(60ball)	4Bank, 2.6V, 4-5-5	EOL	
			H5DU2562GTR-FAC(I/L)	TSOPII(66pin)	4Bank, 2.5V, 4-4-4	Now	
			HY5DU561622F(L)TP-D43(I)	TSOPII(66pin)	4Bank, 2.5V, 3-3-3	EOL	
		DDR 400	HY5DU561622F(L)FP-D43(I)	FBGA(60ball)	4Bank, 2.5V, 3-3-3	EOL	
			H5DU2562GTR-E3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, 3-3-3	Now	
			H5DU2562GFR-E3C(I/L)	FBGA(60ball)	4Bank, 2.5V, 3-3-3	Now	
			HY5DU561623F(L)TP-J(I)	TSOPII(67pin)	4Bank, 2.5V, CL2.5	EOL	
		DDR 333	HY5DU561622F(L)FP-J(I)	FBGA(60ball)	4Bank, 2.5V, CL2.5	EOL	
			H5DU2562GTR-J3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			H5DU2562GFR-J3C(I/L)	FBGA(60ball)	4Bank, 2.5V, CL2.5	Now	
			HY5DU561622F(L)TP-H(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL	
		DDR 266	HY5DU561622F(L)FP-H(I)	FBGA(60ball)	4Bank, 2.5V, CL2.5	EOL	
			H5DU2562GTR-K3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			H5DU2562GFR-K3C(I/L)	FBGA(60ball)	4Bank, 2.5V, CL2.5	Now	
			HY5DU561622F(L)TP-H(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL	
128Mb	8Mx16	DDR 500	HY5DU281622FTP-4(I)	TSOPII(66pin)	4Bank, 2.6V, 3-3-3	EOL	
			H5DU1262GTR-FBC	TSOPII(66pin)	4Bank, 2.5V, 4-3-3	Now	
		DDR 400	HY5DU281622FTP-D43(I)	TSOPII(66pin)	4Bank, 2.6V, 3-3-3	EOL	
			HY5DU281622FTP-5(I)	TSOPII(66pin)	4Bank, 2.6V, 3-4-4	EOL	
			H5DU1262GTR-E3C	TSOPII(66pin)	4Bank, 2.5V, 3-3-3	Now	
		DDR 333	HY5DU281622FTP-J(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL	
	H5DU1262GTR-J3C		TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now		
	DDR 266	HY5DU281622FTP-H(I)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	EOL		
	64Mb	4M x 16	DDR 500	H5DU6462CTR-FAC	TSOPII(66pin)	4Bank,2.5V, 4-4-4	Now
			DDR 400	H5DU6462CTR-E3C	TSOPII(66pin)	4Bank,2.5V, 3-3-3	Now
			DDR 333	H5DU6462CTR-J3C	TSOPII(66pin)	4Bank,2.5V, 2.5-3-3	Now
			DDR 266	H5DU6462CTR-K3C	TSOPII(66pin)	4Bank,2.5V, 2.5-3-3	Now

\* All DDR DRAM is Available For IT-Part



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.		
2Gb	128Mx16	DDR2 667	H5PS2G63EMR-Y5	FBGA(84ball)	8Bank, 1.8V, 5-5-5	Customer Sample		
		DDR2 800	H5PS2G63EMR-S6	FBGA(84ball)	8Bank, 1.8V, 6-6-6	Customer Sample		
1Gb	128Mx8	DDR2 800	HY5PS1G831CFP-S5	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now		
			H5PS1G83EFR-S5	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now		
		DDR2 667	HY5PS1G831CFP-Y5	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now		
			H5PS1G83EFR-Y5	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now		
		DDR2 533	HY5PS1G831CFP-C4	FBGA(60ball)	8Bank, 1.8V, 4-4-4	Now		
			H5PS1G43EFR-C4	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now		
	DDR2 400	HY5PS1G831CFP-E3	FBGA(60ball)	8Bank, 1.8V, 3-3-3	Now			
	64Mx16	DDR2 1066	H5PS1G63EFR-G7	FBGA(84ball)	8Bank, 1.8V, 7-7-7	Now		
		DDR2 800	HY5PS1G1631CFP-S5	FBGA(84ball)	8Bank, 1.8V, 5-5-5	Now		
			H5PS1G63EFR-S5	FBGA(84ball)	8Bank, 1.8V, 5-5-5	Now		
		DDR2 667	HY5PS1G1631CFP-Y5	FBGA(84ball)	8Bank, 1.8V, 5-5-5	Now		
			H5PS1G63EFR-Y5C	FBGA(84ball)	8Bank, 1.8V, 5-5-5	Now		
		DDR2 533	HY5PS1G1631CFP-C4	FBGA(84ball)	8Bank, 1.8V, 4-4-4	Now		
	DDR2 400	HY5PS1G1631CFP-E3	FBGA(84ball)	8Bank, 1.8V, 3-3-3	Now			
	32Mx32	DDR2 667	H5PS1GC2FMR-Y5	FBGA(128ball)	8Bank, 1.8V, 5-5-5	Now		
		DDR2 800	H5PS1GC2FMR-S6	FBGA(128ball)	8Bank, 1.8V, 6-6-6	Now		
	512Mb	64Mx8	DDR2 800	HY5PS12821CFP-S6	FBGA(60ball)	4Bank, 1.8V, 6-6-6	EOL	
				HY5PS12821CFP-S5	FBGA(60ball)	4Bank, 1.8V, 5-5-5	EOL	
H5PS5182FFP-S5				FBGA(60ball)	4Bank, 1.8V, 5-5-5	Now		
DDR2 667			HY5PS12821CFP-Y5	FBGA(60ball)	4Bank, 1.8V, 5-5-5	EOL		
			H5PS5182FFP-Y5	FBGA(60ball)	4Bank, 1.8V, 5-5-5	Now		
DDR2 533			HY5PS12821CFP-C4	FBGA(60ball)	4Bank, 1.8V, 4-4-4	EOL		
			HY5PS12821FFP-C4	FBGA(60ball)	4Bank, 1.8V, 4-4-4	Now		
DDR2 400			HY5PS12821CFP-E3	FBGA(60ball)	4Bank, 1.8V, 3-3-3	EOL		
		HY5PS12821FFP-E3	FBGA(60ball)	4Bank, 1.8V, 3-3-3	Now			
32Mx16		DDR2 1066	H5PS5162FFR-G7	FBGA(84ball)	4Bank, 1.8V, 7-7-7	Now		
		DDR2 800	HY5PS121621CFP-S6	FBGA(84ball)	4Bank, 1.8V, 6-6-6	EOL		
			HY5PS121621CFP-S5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	EOL		
			H5PS5162FFR-S6	FBGA(84ball)	4Bank, 1.8V, 6-6-6	Now		
			H5PS5162FFR-S5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	Now		
		DDR2 667	HY5PS121621CFP-Y5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	EOL		
			H5PS5162FFR-Y5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	Now		
		DDR2 533	HY5PS121621CFP-C4	FBGA(84ball)	4Bank, 1.8V, 4-4-4	EOL		
			H5PS5162FFR-C4	FBGA(84ball)	4Bank, 1.8V, 4-4-4	Now		
		DDR2 400	HY5PS121621CFP-E3	FBGA(84ball)	4Bank, 1.8V, 3-3-3	EOL		
			H5PS5162FFR-E3	FBGA(84ball)	4Bank, 1.8V, 3-3-3	Now		
		256Mb	16Mx16	DDR2 800	HY5PS561621BFP-S6(I)	FBGA(84ball)	4Bank, 1.8V, 6-6-6	EOL
				DDR2 667	HY5PS561621BFP-Y5(I)	FBGA(84ball)	4Bank, 1.8V, 5-5-5	EOL
				DDR2 533	HY5PS561621BFP-C4	FBGA(84ball)	4Bank, 1.8V, 4-4-4	EOL
				DDR2 400	HY5PS561621BFP-E3	FBGA(84ball)	4Bank, 1.8V, 3-3-3	EOL

\* All DDR2 DRAM is Available For IT-Part



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1Gb	128Mx8	DDR3 1333	H5TQ1G83BFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now
		DDR3 1066	H5TQ1G83BFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now
	64Mx16	DDR3 1333	H5TQ1G63BFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now
		DDR3 1066	H5TQ1G63BFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now

\* All DDR3 DRAM is Available For IT-Part





### GRAPHICS DDR2 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1Gb	64Mx16	500MHz (2.0ns)	H5PS1G63EFR-20L	FBGA(84ball)	8Bank, 1.8V/1.8V	Now
		400MHz (2.5ns)	H5PS1G63EFR-25C	FBGA(84ball)	8Bank, 1.8V/1.8V	Now
			HY5PS1G1631CFR-25C	FBGA(84ball)	8Bank, 1.8V/1.8V	Now
512Mb	32Mx16	600MHz (1.6ns)	H5PS5162FFR-16C	FBGA(84ball)	4Bank, 2.0V/2.0V	Now
		500MHz (2.0ns)	H5PS5162FFR-20C	FBGA(84ball)	4Bank, 2.0V/2.0V	Now
			H5PS5162FFR-20L	FBGA(84ball)	4Bank, 1.8V/1.8V	Now
		400MHz (2.5ns)	H5PS5162FFR-25C	FBGA(84ball)	4Bank, 1.8V/1.8V	Now

### GRAPHICS DDR3 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
2Gb	128Mx16	1GHz (1.0ns)	H5TQ2G63BFR-N0C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		900MHz (1.1ns)	H5TQ2G63BFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		800MHz (1.2ns)	H5TQ2G63BFR-12C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
1Gb	64Mx16	900MHz (1.1ns)	H5TS1G63BFR-11C	FBGA(96ball)	8Bank, 1.8V/1.8V	Now
			H5TQ1G63BFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		800MHz (1.2ns)	H5TS1G63BFR-12C	FBGA(96ball)	8Bank, 1.8V/1.8V	Now
			H5TQ1G63BFR-12C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		700MHz(1.4ns)	H5TQ1G63BFR-14C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1Gb	32Mx32	1,300MHz(0.77ns)	H5RS1H23MFR-N3C	FBGA(136ball)	8banks, 1.9V/1.9V	Now
		1,200MHz(0.8ns)	H5RS1H23MFR-N2C	FBGA(136ball)	8banks, 1.9V/1.9V	Now
		1,000MHz(1.0ns)	H5RS1H23MFR-N0C	FBGA(136ball)	8banks, 1.9V/1.9V	Now
		900MHz(1.1ns)	H5RS1H23MFR-11C	FBGA(136ball)	8banks, 1.8V/1.8V	Now
		700MHz(1.4ns)	H5RS1H23MFR-14C	FBGA(136ball)	8banks, 1.8V/1.8V	Now
512Mb	16Mx32	1,300MHz(0.77ns)	H5RS5223CFR-N3C	FBGA(136ball)	8Bank, 2.05V/2.05V	Now
			H5RS5223DFR-N3C	FBGA(136ball)	8Bank, 2.05V/2.05V	Apr.
		1,200MHz(0.8ns)	H5RS5223CFR-N2C	FBGA(136ball)	8Bank, 2.05V/2.05V	Now
			H5RS5223DFR-N2C	FBGA(136ball)	8Bank, 2.05V/2.05V	Apr.
		1,000MHz(1.0ns)	H5RS5223CFR-N0C	FBGA(136ball)	8Bank, 2.05V/2.05V	Now
			H5RS5223DFR-N0C	FBGA(136ball)	8Bank, 2.05V/2.05V	Apr.
		900MHz(1.1ns)	H5RS5223CFR-11C	FBGA(136ball)	8Bank, 1.8V/1.8V	Now
			H5RS5223DFR-11C	FBGA(136ball)	8Bank, 1.8V/1.8V	Apr.
		700MHz(1.4ns)	H5RS5223CFR-14C	FBGA(136ball)	8Bank, 1.8V/1.8V	Now
			H5RS5223CFR-14L	FBGA(136ball)	8Bank, 1.5V/1.5V	Now
			H5RS5223DFR-14C	FBGA(136ball)	8Bank, 1.8V/1.8V	Apr.
		500MHz(2.0ns)	H5RS5223CFR-20C	FBGA(136ball)	8Bank, 1.8V/1.8V	Now
			H5RS5223DFR-20C	FBGA(136ball)	8Bank, 1.8V/1.8V	Apr.
		550MHz(1.8ns)	H5RS5223CFR-18C	FBGA(136ball)	8Bank, 1.5V/1.5V	Now



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1Gb	32Mx32	6.0Gbps	H5GQ1H24AFR-R0C	FBGA(170ball)	16Bank, 1.6V/1.6V	Now
		5.5Gbps	H5GQ1H24AFR-T3C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		5.0Gbps	H5GQ1H24AFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		4.5Gbps	H5GQ1H24AFR-T1C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
			H5GQ1H24MJ(F)R-T1C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		4.0Gbps	H5GQ1H24AFR-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
			H5GQ1H24MJ(F)R-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		3.6Gbps	H5GQ1H24MJ(F)R-N8C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		3.2Gbps	H5GQ1H24MJ(F)R-N6C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
2Gb	64M x 16	133MHz (7.5ns)	H55S1G62MFP-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G62MFP-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32	133MHz (7.5ns)	H55S1G22MFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G22MFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32 (reduced page size)	133MHz (7.5ns)	H55S1G32MFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G32MFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
1Gb	64M x 16	133MHz (7.5ns)	H55S1G62MFP-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G62MFP-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		133MHz (7.5ns)	H55S1G62AFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G62AFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32	133MHz (7.5ns)	H55S1G22MFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G22MFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz (7.5ns)	H55S1G22AFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G22AFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32 (reduced page size)	133MHz (7.5ns)	H55S1G32MFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G32MFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz (7.5ns)	H55S1G32AFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H55S1G32AFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	512M	32M x 16	133MHz (7.5ns)	HY5S7B6ALFP-HE	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
				H55S5162DFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
H55S5162EFR-75M				FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
166MHz (6.0ns)			HY5S7B6ALFP-6E	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
			H55S5162DFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
			H55S5162EFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
16M x 32		133MHz (7.5ns)	HY5S7B2ALFP-HE	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			H55S5122DFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			H55S5122EFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	HY5S7B2ALFP-6E	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			H55S5122DFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			H55S5122EFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
256Mb	16M x 16	133MHz (7.5ns)	HY5S5B6HLFP-HE	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
			H55S2562JFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	HY5S5B6HLFP-6E	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
			H55S2562JFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
	8M x 32	133MHz (7.5ns)	HY5S5B2CLFP-HE	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			H55S2622JFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
166MHz (6.0ns)	HY5S5B2CLFP-6E	FBGA(90ball)	4Bank, 1.8V/1.8V	Now			
	H55S2622JFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now			
128Mb	8M x 16	133MHz (7.5ns)	H55S1262EFP-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	EOL	
		166MHz (6.0ns)	H55S1262EFP-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	EOL	
	4M x 32	133MHz (7.5ns)	H55S1222EFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	EOL	
		166MHz (6.0ns)	H55S1222EFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	EOL	

\* All SDRAM is Available For Lead Free or Lead & Halogen Free



DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.		
2Gb	64M x 16	200MHz (5.0ns)	H5MS2G62MFR-EBM	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS2G62MFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
	32M x 32	200MHz (5.0ns)	H5MS2G22MFR-EBM	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS2G22MFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
	32M x 32 (reduced page size)	200MHz (5.0ns)	H5MS2G32MFR-EBM	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS2G32MFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
1Gb	64M x 16	200MHz (5.0ns)	H5MS1G62MFP-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS1G62MFP-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
		133MHz (7.5ns)	H5MS1G62MFP-K3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
		200MHz (5.0ns)	H5MS1G62AFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS1G62AFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
		200MHz (5.0ns)	H5MS1G22MFP-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
	32M x 32	166MHz (6.0ns)	H5MS1G22MFP-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		133MHz (7.5ns)	H5MS1G22MFP-K3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		200MHz (5.0ns)	H5MS1G22AFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS1G22AFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		32M x 32 (reduced page size)	200MHz (5.0ns)	H5MS1G32MFP-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			166MHz (6.0ns)	H5MS1G32MFP-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	133MHz (7.5ns)		H5MS1G32MFP-K3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
	200MHz (5.0ns)		H5MS1G32AFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
	166MHz (6.0ns)		H5MS1G32AFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
	200MHz (5.0ns)		H5MS5162DFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
	512Mb	32M x 16	200MHz (5.0ns)	H5MS5162EFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now	
			166MHz (6.0ns)	H5MS5162DFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now	
166MHz (6.0ns)			H5MS5162EFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
166MHz (6.0ns)			HY5MS7B6BLFP-6E	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
133MHz (7.5ns)			H5MS5162DFR-K3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
133MHz (7.5ns)			HY5MS7B6BLFP-HE	FBGA(60ball)	4Bank, 1.8V/1.8V	Now		
16M x 32			200MHz (5.0ns)	H5MS5122DFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			200MHz (5.0ns)	H5MS5122EFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz (6.0ns)	H5MS5122DFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	H5MS5122EFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		166MHz (6.0ns)	HY5MS7B2BLFP-6E	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		133MHz (7.5ns)	H5MS5122DFR-K3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		133MHz (7.5ns)	HY5MS7B2BLFP-HE	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
		256Mb	16M x 16	200MHz (5.0ns)	H5MS2562JFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
				166MHz (6.0ns)	H5MS2562JFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
				133MHz (7.5ns)	HY5MS5B6BLFP-6E	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
H5MS2562JFR-K3M					FBGA(60ball)	4Bank, 1.8V/1.8V	Now	
HY5MS5B6BLFP-HE					FBGA(60ball)	4Bank, 1.8V/1.8V	Now	
8M x 32	200MHz (5.0ns)		H5MS2622JFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
	166MHz (6.0ns)		H5MS2622JFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
			HY5MS5B2ALFP-6E	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
			133MHz (7.5ns)	H5MS2622JFR-K3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
			HY5MS5B2ALFP-HE	FBGA(90ball)	4Bank, 1.8V/1.8V	Now		
128Mb	8M x 16	166MHz (6.0ns)	H5MS1262EFP-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	EOL		
		133MHz (7.5ns)	H5MS1262EFP-K3M	FBGA(60ball)	4Bank, 1.8V/1.8V	EOL		
	4M x 32	166MHz (6.0ns)	H5MS1222EFP-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	EOL		
		133MHz (7.5ns)	H5MS1222EFP-K3M	FBGA(90ball)	4Bank, 1.8V/1.8V	EOL		

\* All SDRAM is Available For Lead Free or Lead & Halogen Free



### NAND Flash SLC COMPONENT

Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Avail.	Remark
HY27US08281A	90nm	128Mb	16KB	Mono	3.3v/X8	TSOP/USOP	Now	
HY27US08561A	90nm	256Mb	16KB	Mono	3.3v/X8	TSOP/USOP/FBGA	Now	
HY27US08121B	70nm	512Mb	16KB	Mono	3.3v/X8	TSOP/USOP/FBGA	Now	
H27U518S2C	57nm	512Mb	16KB	Mono	3.3v/X8	TSOP	Now	
HY27US081G1M	70nm	1Gb	16KB	Mono	3.3v/X8	USOP	Now	
HY27US081G1A	57nm	1Gb	16KB	Mono	3.3v/X8	TSOP	Now	
HY27UF081G2A	70nm	1Gb	128KB	Mono	3.3v/X8	TSOP/USOP/FBGA	Now	
HY27US081G2A	70nm	1Gb	128KB	Mono	1.8v/X8	FBGA	Now	
H27U1G8F2B	48nm	1Gb	128KB	Mono	3.3v/X8	TSOP,FBGA	Now	
H27U1G8F2B	48nm	1Gb	128KB	Mono	1.8v/X8	FBGA	Now	
HY27UF082G2A	70nm	2Gb	128KB	Mono	3.3v/X8	TSOP/LGA	Now	
HY27UF082G2B	57nm	2Gb	128KB	Mono	3.3v/X8	TSOP,FBGA	Now	
HY27UF084G2B	57nm	4Gb	128KB	Mono	3.3v/X8	TSOP	Now	
H27U4G8F2D	41nm	4Gb	128KB	Mono	3.3v/X8	TSOP	Now	
HY27UG088G5(D)B	57nm	8Gb	128KB	DDP	3.3v/X8	TSOP/LGA	Now	2CE/Dual CH.
HY27UH08AG5B	57nm	16Gb	128KB	QDP	3.3v/X8	TSOP	Now	2CE

### NAND Flash MLC COMPONENT

Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Avail.	Remark
H27U8G8T2B	48nm	8Gb	512KB	Mono	3.3v/X8	TSOP	Now	
H27UAG8T2M	48nm	16Gb	512KB(4KB Page)	Mono	3.3v/X8	TSOP/VLGA	Now	
H27UAG8T2A	41nm	16Gb	512KB(4KB Page)	Mono	3.3v/X8	TSOP	Now	
H27UBG8U5A	41nm	32Gb	512KB(4KB Page)	DDP	3.3v/X8	TSOP	Now	
H27UBG8T2M	41nm	32Gb	512KB(4KB Page)	Mono	3.3v/X8	VLGA	Now	
H27UBG8T2A	32nm	32Gb	2MB(8KB Page)	SDP	3.3v/x8	TSOP / VLGA	Now	
H27UCG8VFA	41nm	64Gb	512KB(4KB Page)	QDP	3.3v/X8	TSOP	Now	
H27UCG8UDM	41nm	64Gb	512KB(4KB Page)	DDP	3.3v/X8	VLGA	Now	Dual CH.
H27UCG8U5(D)A	32nm	64Gb	2MB(8KB Page)	DDP	3.3v/x8	TSOP / VLGA	Now	Dual CH. LGA
H27UDG8VEM	41nm	128Gb	512KB(4KB Page)	QDP	3.3v/X8	VLGA	Now	4CE,Dual CH.
H27UDG8V5(E)A	32nm	128Gb	2MB(8KB Page)	QDP	3.3v/x8	TSOP / VLGA	Now	4CE,Dual CH.
H27UEG8YEA	32nm	256Gb	2MB(8KB Page)	ODP	3.3v/x8	VLGA	Apr.	4CE,Dual CH.

### NAND Flash TLC COMPONENT

Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Avail.	Remark
H2EUAG8M2MYR-C	41nm	16Gb	768KB (192 Block)	SDP	3.3V/x8	VLGA	Now	



Product	Density	Base Component			Vcc/Org	Version	Aval.
		Tech.	Density	Stack			
H26M11001BAR	1GB	48nm	8Gb	1	3.3V/x8/x4	MMC4.3	Now
H26M21001CAR	2GB	41nm	16Gb	1	3.3V/x8/x4	MMC4.3	Now
H26M32001CAR	4GB	41nm	16Gb	2	3.3V/x8/x4	MMC4.3	Now
H26M32001DAR	4GB	32nm	32Gb	1	3.3V/x8/x4	MMC4.4	Apr.
H26M42001DAR	8GB	41nm	16Gb	2	3.3V/x8/x4	MMC4.3	Now
H26M42001EFR	8GB	32nm	32Gb	2	3.3V/x8/x4	MMC4.4	Apr.
H26M54001AJR	16GB	41nm	32Gb	4	3.3V/x8/x4	MMC4.3	Now
H26M54001BKR	16GB	32nm	32Gb	4	3.3V/x8/x4	MMC4.4	Apr.
H26M68001MJR	32GB	41nm	32Gb	8	3.3V/x8/x4	MMC4.3	Now
H26M68001ANR	32GB	32nm	32Gb	8	3.3V/x8/x4	MMC4.4	Apr.



Product	Density	Base Component			Vcc/Bus	Version	Aval.
		Tech.	Density	Stack			
H24U1GTM3ARH	1GB	48nm	8Gb	1	3.3v/x4	Class-4	Now
H24U2GTM1BRH	2GB	41nm	16Gb	1	3.3v/x4	Class-4	Now
H24U4GUM1ARH	4GB	41nm	16Gb	2	3.3v/x4	Class-6	Now
H24U8GVM1MRH	8GB	41nm	16Gb	4	3.3v/x4	Class-6	Now
H24UAGYM1MRH	16GB	41nm	16Gb	4	3.3v/x4	Class-6	Now
H24U2GMM1CRH	2GB	41nm	16Gb (TLC)	1	3.3v/x4	-	Apr.





# AND Flash

## E2NAND2.0



Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Avail.	Remark
H2DQDG8VD1MYR	32nm	128Gb	256KB	4	3.3v/X8	VLGA	Apr.	VccQ=1.8V
H2DUDG8VD1MYR	32nm	128Gb	256KB	4	3.3v/X8	VLGA	Apr.	VccQ=3.3V
H2DQEG8VD1MYR	32nm	256Gb	256KB	8	3.3v/X8	VLGA	Apr.	VccQ=1.8V
H2DUEG8VD1MYR	32nm	256Gb	256KB	8	3.3v/X8	VLGA	Apr.	VccQ=3.3V



# IS CMOS Image Sensor



		VGA		1.3M
<b>Part Number</b>		YACBAC1S	YACBA21S	YACC6A1S
<b>Optical Format</b>		1/10-inch	1/10-inch	1/6"
<b>Pixel Size</b>		2.25um x 2.25um	2.25um x 2.25um	1.75um x 1.75um
<b>Active Array Format</b>		640H x 480V	640H x 480V	1280H x 1024H
<b>Imaging Area</b>		1.44mmx1.08mm	1.44mmx1.08mm	2.30mm x 1.85mm
<b>Color Filter Array</b>		RGB Bayer color filters	RGB Bayer color filters	RGB Bayer color filters
<b>Frame Rate</b>		30-fps @ full resolution	30-fps @ full resolution	15fps @ full resolution
<b>Shutter</b>		Electronic Rolling Shutter	Electronic Rolling Shutter	Electronic Rolling Shutter
<b>Features</b>		Automatic Exposure, Automatic White Balance, Automatic Black Level Calibration, On-Chip Dead Pixel Correction, Windowing, Sub-Sampling, Image Scaling, X-Y Image Flip, Anti-flicker, Noise Reduction, Edge Enhancement, Brightness, Color saturation, Gamma Correction	Automatic Exposure, Automatic White Balance, Automatic Black Level Calibration, On-Chip Dead Pixel Correction, Windowing, Sub-Sampling, X-Y Image Flip, Anti-flicker, Noise Reduction, Edge Enhancement, Brightness, Color Saturation, Gamma Correction, Color Correction, Lens shading Correction	Automatic Exposure, Automatic White Balance, Automatic Black Level Calibration, On-Chip Dead Pixel Correction, Windowing, Sub-Sampling, Image Scaling, X-Y Image Flip, Anti-flicker, Noise Reduction, Edge Enhancement, Brightness, Gamma Correction, Color saturation, Gamma Correction
<b>Sensitivity</b>		1280mV/lux-sec	TBD	700mV/lux-sec
<b>SNR</b>		39dB		38dB
<b>Dynamic Range</b>		60dB		60dB
<b>ADC</b>		On-chip, 10-bit	On-chip, 10-bit	On-chip, 10-bit
<b>Output Format</b>		YUV4:2:2 RGB5:6:5 RGB4:4:4	YUV4:2:2 RGB5:6:5 RGB4:4:4	YUV4:2:2 RGB5:6:5 ITU656-like
Supply Voltage	<b>Digital I/O</b>	1.7V-3.0V (1.8V/2.8V)	1.7V-3.0V (1.8V/2.8V)	1.7V-3.0V (1.8V/2.8V)
	<b>Digital Core</b>	1.7V-1.9V (1.8V)	2.7V-3.0V (2.8V) with Single Regulator	1.7V-1.9V (1.8V)
	<b>Analog &amp; Pixel</b>	2.7V-3.0V (2.8V)		2.7V-3.0V (2.8V)
<b>Power Consumption</b>		100mW (typ.)	TBD	TBD
<b>Operating Temp.</b>		-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
<b>Status</b>		Mass Production / CSP Available	Sampling / WLCSP Pkg	Mass Production



# IS CMOS Image Sensor



		2M	3M	
<b>Part Number</b>		YACD5B1S	YACE4A1S	YACE4B1S
<b>Optical Format</b>		1/5 inch	1/4 inch	1/4 inch
<b>Pixel Size</b>		1.75um x 1.75um	1.75um x 1.75um	1.75um x 1.75um
<b>Active Array Format</b>		1600H x 1200V	2048H x 1536V	2048H x 1536V
<b>Imaging Area</b>		2.80mmx2.10mm	3.58mmx2.69mm	3.58mmx2.69mm
<b>Color Filter Array</b>		RGB Bayer color filters	RGB Bayer color filters	RGB Bayer color filters
<b>Frame Rate</b>		15-fps @ full resolution	15-fps @ full resolution	15-fps @ full resolution
<b>Shutter</b>		Electronic Rolling Shutter	Electronic Rolling Shutter	Electronic Rolling Shutter
<b>Features</b>		Automatic Exposure, Automatic White Balance, Automatic Black Level Calibration, On-Chip Dead Pixel Correction, Edge Data for Auto Focus, Motion Data for Anti-Shaking, Windowing, Sub-Sampling, Image Scaling, X-Y Image Flip, Anti-flicker, Noise Reduction, Edge Enhancement	Automatic Exposure, Automatic White Balance, Automatic Black Level Calibration, On-Chip Dead Pixel Correction, Auto Focus Data, Anti-Shaking Function, Windowing, Sub-Sampling, Image Scaling, Image Scaling, X-Y Image Flip, Anti-flicker, Noise Reduction, Edge Enhancement	Automatic Exposure, Automatic White Balance, Automatic Black Level Calibration, On-Chip Dead Pixel Correction, Auto Focus Data, Anti-Shaking Function, Windowing, Sub-Sampling, Image Scaling, Image Scaling, X-Y Image Flip, Anti-flicker, Noise Reduction, Edge Enhancement
<b>Sensitivity</b>		700mV/lux-sec	TBD	TBD
<b>SNR</b>		38dB	TBD	TBD
<b>Dynamic Range</b>		60dB	TBD	TBD
<b>ADC</b>		On-chip, 10-bit	On-chip, 10-bit	On-chip, 10-bit
<b>Output Format</b>		YUV4:2:2 RGB5:6:5 ITU656-like	JPEG Compressed Data YUV4:2:2 RGB5:6:5 RGB6:6:6 ITU656-like	YUV4:2:2 RGB5:6:5 RGB6:6:6 ITU656-like
Supply Voltage	<b>Digital I/O</b>	1.7V-3.0V (1.8V/2.8V)	1.7V – 3.0V	1.7V – 3.0V
	<b>Digital Core</b>	1.7V-1.9V (1.8V)	1.7V – 1.9V	1.7V – 1.9V
	<b>Analog &amp; Pixel</b>	2.7V-3.0V (2.8V)	2.7V – 3.0V	2.7V – 3.0V
<b>Power Consumption</b>		288mw(typ.)	TBD	TBD
<b>Operating Temp.</b>		-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃
<b>Status</b>		Mass Production	Sampling	Sampling