

SK Hynix
Dreams
Good Memory



Q2' 2012 DATABOOK



Computing Memory

DDR3 SDRAM : Component

VDD	DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
1.5V	2Gb	512Mx4	DDR3 1866	H5TQ2G43EFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	CS :Jul'12	
			DDR3 1600	H5TQ2G43CFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
				H5TQ2G43EFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	CS :Jul'12	
			DDR3 1333	H5TQ2G43CFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				H5TQ2G43EFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	CS :Jul'12	
			DDR3 1066	H5TQ2G43CFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
		H5TQ2G43EFR-G7C		FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	CS :Jul'12		
		256Mx8	DDR3 1866	H5TQ2G83EFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	CS :Jul'12	
				DDR3 1600	H5TQ2G83CFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now
			H5TQ2G83EFR-PBC		FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	CS :Jul'12	
			DDR3 1333	H5TQ2G83CFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
				H5TQ2G83EFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	CS :Jul'12	
			DDR3 1066	H5TQ2G83CFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
		H5TQ2G83EFR-G7C		FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	CS :Jul'12		
		128Mx16	DDR3 1600	H5TQ2G63DFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	Now	
				DDR3 1333	H5TQ2G63DFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now
					H5TQ2G63DFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now
		4Gb	1Gx4	DDR3 1600	H5TQ4G43MFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now
	DDR3 1333			H5TQ4G43MFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
	DDR3 1066			H5TQ4G43MFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
	1Gx4 (DDP)		DDR3 1600	H5TQ4G43BMR-PBC	FBGA(82ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			DDR3 1333	H5TQ4G43BMR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			DDR3 1066	H5TQ4G43BMR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now	
	512Mx8		DDR3 1600	H5TQ4G83MFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
DDR3 1333			H5TQ4G83MFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now		
DDR3 1066			H5TQ4G83MFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now		
512Mx8 (DDP)	DDR3 1600		H5TQ4G83BMR-PBC	FBGA(82ball)	8Bank, 1.5V, CL11,11-11-11	Now		
	DDR3 1333		H5TQ4G83BMR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now		
	DDR3 1066		H5TQ4G83BMR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now		
8Gb	2Gx4 (DDP)		DDR3 1600	H5TQ8G43MMR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			DDR3 1333	H5TQ8G43MMR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			DDR3 1066	H5TQ8G43MMR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
	1Gx8 (DDP)	DDR3 1600	H5TQ8G83MMR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now		
		DDR3 1333	H5TQ8G83MMR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now		
		DDR3 1066	H5TQ8G83MMR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now		

Computing Memory

DDR3 SDRAM : Component

VDD	DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
1.35V	2Gb	512Mx4	DDR3 1600	H5TC2G43CFR-PBA	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
				H5TC2G43EFR-PBA	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	CS :Jul'12	
			DDR3 1333	H5TC2G43CFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC2G43EFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	CS :Jul'12	
			DDR3 1066	H5TC2G43CFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
				H5TC2G43EFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	CS :Jul'12	
		256Mx8	DDR3 1600	H5TC2G83CFR-PBA	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
				H5TC2G83EFR-PBA	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	CS :Jul'12	
			DDR3 1333	H5TC2G83CFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC2G83EFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	CS :Jul'12	
			DDR3 1066	H5TC2G83CFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
				H5TC2G83EFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	CS :Jul'12	
	128Mx16	DDR3 1600	H5TQ2G63DFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	Now		
			H5TQ2G63DFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now		
			H5TQ2G63DFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now		
	4Gb	1Gx4	DDR3 1333	H5TC4G43MFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC4G43MFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
		512Mx8	DDR3 1333	H5TC4G43BMR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC4G43BMR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Now	
			DDR3 1333	H5TC4G83MFR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC4G83MFR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
DDR3 1333			H5TC4G83BMR-H9A	FBGA(82ball)	8Bank, 1.35V, CL9,9-9-9	Now		
			H5TC4G83BMR-G7A	FBGA(82ball)	8Bank, 1.35V, CL7,7-7-7	Now		
8Gb			2Gx4 (DDP)	DDR3 1333	H5TC8G43MMR-H9C	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now
					H5TC8G43MMR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now
		1Gx8 (DDP)	DDR3 1333	H5TC8G83MMR-H9A	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
				H5TC8G83MMR-G7A	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	



Computing Memory

DDR2 SDRAM : Component

VDD	DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1.8V	1Gb	128Mx8	DDR2 800	H5PS1G83EFR-S5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
			DDR2 667	H5PS1G83EFR-Y5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now
			DDR2 533	H5PS1G43EFR-C4C	FBGA(60ball)	8Bank, 1.8V, CL4,4-4-4	Now
		64Mx16	DDR2 800	H5PS1G63EFR-S5C	FBGA(84ball)	8Bank, 1.8V, CL5,5-5-5	Now
			DDR2 667	H5PS1G63EFR-Y5C	FBGA(60ball)	8Bank, 1.8V, CL5,5-5-5	Now



Computing Memory

DDR3 SDRAM : Module - UBDIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.			
	DENSITY	ORG.										
1.5V	8GB	1Gx64	512Mx8	1600-111111	HMT41GU6MFR8C-PB	FBGA(78ball)	2	30mm	Now			
				1333-999	HMT41GU6MFR8C-H9	FBGA(78ball)	2	30mm	Now			
				1066-777	HMT41GU6MFR8C-G7	FBGA(78ball)	2	30mm	Now			
		1Gx72	512Mx8	1600-111111	HMT41GU7MFR8C-PB	FBGA(78ball)	2	30mm	Now			
				1333-999	HMT41GU7MFR8C-H9	FBGA(78ball)	2	30mm	Now			
				1066-777	HMT41GU7MFR8C-G7	FBGA(78ball)	2	30mm	Now			
	4GB	512Mx64	512Mx8	1600-111111	HMT451U6MFR8C-PB	FBGA(78ball)	1	30mm	Now			
				1333-999	HMT451U6MFR8C-H9	FBGA(78ball)	1	30mm	Now			
				1066-777	HMT451U6MFR8C-G7	FBGA(78ball)	1	30mm	Now			
				256Mx8	1600-111111	HMT351U6CFR8C-PB	FBGA(78ball)	2	30mm	Now		
						HMT351U6EFR8C-PB	FBGA(78ball)	2	30mm	CS		
					1333-999	HMT351U6CFR8C-H9	FBGA(78ball)	2	30mm	Now		
			512Mx72	256Mx8	1066-777	HMT351U6CFR8C-G7	FBGA(78ball)	2	30mm	Now		
						HMT351U6EFR8C-G7	FBGA(78ball)	2	30mm	CS		
					1600-111111	HMT351U7CFR8C-PB	FBGA(78ball)	2	30mm	Now		
						HMT351U7EFR8C-PB	FBGA(78ball)	2	30mm	CS		
					1333-999	HMT351U7CFR8C-H9	FBGA(78ball)	2	30mm	Now		
						HMT351U7EFR8C-H9	FBGA(78ball)	2	30mm	CS		
		2GB	256Mx64	256Mx8	1600-111111	HMT325U6CFR8C-PB	FBGA(78ball)	1	30mm	Now		
						HMT325U6EFR8C-PB	FBGA(78ball)	1	30mm	CS		
					1333-999	HMT325U6CFR8C-H9	FBGA(78ball)	1	30mm	Now		
						HMT325U6EFR8C-H9	FBGA(78ball)	1	30mm	CS		
					1066-777	HMT325U6CFR8C-G7	FBGA(78ball)	1	30mm	Now		
						HMT325U6EFR8C-G7	FBGA(78ball)	1	30mm	CS		
256Mx72	256Mx8		1600-111111	HMT325U7CFR8C-PB	FBGA(78ball)	1	30mm	Now				
				HMT325U7EFR8C-PB	FBGA(78ball)	1	30mm	CS				
			1333-999	HMT325U7CFR8C-H9	FBGA(78ball)	1	30mm	Now				
				HMT325U7EFR8C-H9	FBGA(78ball)	1	30mm	CS				
			1066-777	HMT325U7CFR8C-G7	FBGA(78ball)	1	30mm	Now				
				HMT325U7EFR8C-G7	FBGA(78ball)	1	30mm	CS				
1.35V	8GB	1Gx72	512Mx8	1600-111111	HMT41GU7MFR8A-PB	FBGA(78ball)	2	30mm	Now			
				1333-999	HMT41GU7MFR8A-H9	FBGA(78ball)	2	30mm	Now			
				1066-777	HMT41GU7MFR8A-G7	FBGA(78ball)	2	30mm	Now			
				4GB	512Mx72	256Mx8	1600-111111	HMT351U7CFR8A-PB	FBGA(78ball)	2	30mm	Now
								HMT351U7EFR8A-PB	FBGA(78ball)	2	30mm	CS
							1333-999	HMT351U7CFR8A-H9	FBGA(78ball)	2	30mm	Now
		HMT351U7EFR8A-H9	FBGA(78ball)	2			30mm	CS				
	2GB	256Mx72	256Mx8	1066-777			HMT351U7CFR8A-G7	FBGA(78ball)	2	30mm	Now	
							HMT351U7EFR8A-G7	FBGA(78ball)	2	30mm	CS	
				1600-111111	HMT325U7CFR8A-PB	FBGA(78ball)	1	30mm	Now			
				HMT325U7EFR8A-PB	FBGA(78ball)	1	30mm	CS				
	1333-999			HMT325U7CFR8A-H9	FBGA(78ball)	1	30mm	Now				
				HMT325U7EFR8A-H9	FBGA(78ball)	1	30mm	CS				
	1066-777	HMT325U7CFR8A-G7	FBGA(78ball)	1	30mm	Now						
		HMT325U7EFR8A-G7	FBGA(78ball)	1	30mm	CS						



Computing Memory

DDR3 SDRAM : Module - RDIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.	
	DENSITY	ORG.								
1.5V	32GB	4Gx72	2Gx4 (DDP)	1333-999	HMT84GR7MMR4C-H9	FBGA(78ball)	4	30mm	Now	
				1066-777	HMT84GR7MMR4C-G7	FBGA(78ball)	4	30mm	Now	
	16GB	2Gx72	1Gx4	1600-111111	HMT42GR7MFR4C-PB	FBGA(78ball)	2	30mm	Now	
				1333-999	HMT42GR7MFR4C-H9	FBGA(78ball)	2	30mm	Now	
				1066-777	HMT42GR7MFR4C-G7	FBGA(78ball)	2	30mm	Now	
			1Gx4 (DDP)	1333-999	HMT42GR7BMR4C-H9	FBGA(82ball)	4	30mm	Now	
				1066-777	HMT42GR7BMR4C-G7	FBGA(82ball)	4	30mm	Now	
				8GB	1Gx72	1Gx4	1600-111111	HMT41GR7MFR4C-PB	FBGA(78ball)	1
	1333-999	HMT41GR7MFR4C-H9	FBGA(78ball)				1	30mm	Now	
	1066-777	HMT41GR7MFR4C-G7	FBGA(78ball)				1	30mm	Now	
	512Mx8	1600-111111	HMT41GR7MFR8C-PB			FBGA(78ball)	2	30mm	Now	
		1333-999	HMT41GR7MFR8C-H9			FBGA(78ball)	2	30mm	Now	
		1066-777	HMT41GR7MFR8C-G7			FBGA(78ball)	2	30mm	Now	
	512Mx4	1866-131313	HMT31GR7EFR4C-RD			FBGA(78ball)	2	30mm	CS : Jul'12	
		1600-111111	HMT31GR7CFR4C-PB			FBGA(78ball)	2	30mm	Now	
			HMT31GR7EFR4C-PB			FBGA(78ball)	2	30mm	CS : Jul'12	
		1333-999	HMT31GR7CFR4C-H9			FBGA(78ball)	2	30mm	Now	
		1066-777	HMT31GR7EFR4C-H9			FBGA(78ball)	2	30mm	CS : Jul'12	
			HMT31GR7CFR4C-G7			FBGA(78ball)	2	30mm	Now	
	HMT31GR7EFR4C-G7	FBGA(78ball)	2			30mm	CS : Jul'12			
		256Mx8	1866-131313			HMT31GR7EFR8C-RD	FBGA(78ball)	4	30mm	CS : Jul'12
	1600-111111		HMT31GR7CFR8C-PB			FBGA(78ball)	4	30mm	Now	
			HMT31GR7EFR8C-PB			FBGA(78ball)	4	30mm	CS : Jul'12	
	1333-999		HMT31GR7CFR8C-H9			FBGA(78ball)	4	30mm	Now	
	1066-777		HMT31GR7EFR8C-H9			FBGA(78ball)	4	30mm	CS : Jul'12	
			HMT31GR7CFR8C-G7	FBGA(78ball)	4	30mm	Now			
	4GB	512Mx72	512Mx4	1866-131313	HMT351R7EFR4C-RD	FBGA(78ball)	1	30mm	CS : Jul'12	
				1600-111111	HMT351R7CFR4C-PB	FBGA(78ball)	1	30mm	Now	
					HMT351R7EFR4C-PB	FBGA(78ball)	1	30mm	CS : Jul'12	
				1333-999	HMT351R7CFR4C-H9	FBGA(78ball)	1	30mm	Now	
				1066-777	HMT351R7EFR4C-H9	FBGA(78ball)	1	30mm	CS : Jul'12	
					HMT351R7CFR4C-G7	FBGA(78ball)	1	30mm	Now	
HMT351R7EFR4C-G7				FBGA(78ball)	1	30mm	CS : Jul'12			
256Mx8				1866-131313	HMT351R7EFR8C-RD	FBGA(78ball)	2	30mm	CS : Jul'12	
				1600-111111	HMT351R7CFR8C-PB	FBGA(78ball)	2	30mm	Now	
					HMT351R7EFR8C-PB	FBGA(78ball)	2	30mm	CS : Jul'12	
			1333-999	HMT351R7CFR8C-H9	FBGA(78ball)	2	30mm	Now		
1066-777			HMT351R7EFR8C-H9	FBGA(78ball)	2	30mm	CS : Jul'12			
			HMT351R7CFR8C-G7	FBGA(78ball)	2	30mm	Now			
HMT351R7EFR8C-G7			FBGA(78ball)	2	30mm	CS : Jul'12				
2GB			256Mx72	256Mx8	1866-131313	HMT325R7EFR8C-RD	FBGA(78ball)	1	30mm	CS : Jul'12
					1600-111111	HMT325R7CFR8C-PB	FBGA(78ball)	1	30mm	Now
						HMT325R7EFR8C-PB	FBGA(78ball)	1	30mm	CS : Jul'12
					1333-999	HMT325R7CFR8C-H9	FBGA(78ball)	1	30mm	Now
	HMT325R7EFR8C-H9	FBGA(78ball)				1	30mm	CS : Jul'12		
	1066-777	HMT325R7CFR8C-G7			FBGA(78ball)	1	30mm	Now		
		HMT325R7EFR8C-G7			FBGA(78ball)	1	30mm	CS : Jul'12		



Computing Memory

DDR3 SDRAM : Module - RDIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.		
	DENSITY	ORG.									
1.35V	32GB	4Gx72	2Gx4 (DDP)	1333-999	HMT84GR7MMR4A-H9	FBGA(78ball)	4	30mm	Now		
				1066-777	HMT84GR7MMR4A-G7	FBGA(78ball)	4	30mm	Now		
	16GB	2Gx72	1Gx4	1600-111111	HMT42GR7MFR4A-PB	FBGA(78ball)	2	30mm	Now		
				1333-999	HMT42GR7MFR4A-H9	FBGA(78ball)	2	30mm	Now		
				1066-777	HMT42GR7MFR4A-G7	FBGA(78ball)	2	30mm	Now		
			1Gx4 (DDP)	1333-999	HMT42GR7BMR4A-H9	FBGA(82ball)	4	30mm	Now		
				1066-777	HMT42GR7BMR4A-G7	FBGA(82ball)	4	30mm	Now		
				8GB	1Gx72	1Gx4	1600-111111	HMT41GR7MFR4A-PB	FBGA(78ball)	1	30mm
	1333-999	HMT41GR7MFR4A-H9	FBGA(78ball)				1	30mm	Now		
	1066-777	HMT41GR7MFR4A-G7	FBGA(78ball)				1	30mm	Now		
	512Mx8	1600-111111	HMT41GR7MFR8A-PB			FBGA(78ball)	2	30mm	Now		
		1333-999	HMT41GR7MFR8A-H9			FBGA(78ball)	2	30mm	Now		
		1066-777	HMT41GR7MFR8A-G7			FBGA(78ball)	2	30mm	Now		
	512Mx4	1600-111111	HMT31GR7CFR4A-PB			FBGA(78ball)	2	30mm	Now		
						HMT31GR7EFR4A-PB	FBGA(78ball)	2	30mm	CS : Jul'12	
						HMT31GR7CFR4A-H9	FBGA(78ball)	2	30mm	Now	
			HMT31GR7EFR4A-H9			FBGA(78ball)	2	30mm	CS : Jul'12		
						1066-777	HMT31GR7CFR4A-G7	FBGA(78ball)	2	30mm	Now
						HMT31GR7EFR4A-G7	FBGA(78ball)	2	30mm	CS : Jul'12	
			256Mx8			1600-111111	HMT31GR7CFR8A-PB	FBGA(78ball)	4	30mm	Now
								HMT31GR7EFR8A-PB	FBGA(78ball)	4	30mm
							1333-999	HMT31GR7CFR8A-H9	FBGA(78ball)	4	30mm
	HMT31GR7EFR8A-H9	FBGA(78ball)						4	30mm	CS : Jul'12	
	1066-777	HMT31GR7CFR8A-G7					FBGA(78ball)	4	30mm	Now	
		HMT31GR7EFR8A-G7					FBGA(78ball)	4	30mm	CS : Jul'12	
	4GB	512Mx72	512Mx4	1600-111111	HMT351R7CFR4A-PB	FBGA(78ball)	1	30mm	Now		
					HMT351R7EFR4A-PB	FBGA(78ball)	1	30mm	CS : Jul'12		
					1333-999	HMT351R7CFR4A-H9	FBGA(78ball)	1	30mm	Now	
				HMT351R7EFR4A-H9	FBGA(78ball)	1	30mm	CS : Jul'12			
					1066-777	HMT351R7CFR4A-G7	FBGA(78ball)	1	30mm	Now	
					HMT351R7EFR4A-G7	FBGA(78ball)	1	30mm	CS : Jul'12		
				256Mx8	1600-111111	HMT351R7CFR8A-PB	FBGA(78ball)	2	30mm	Now	
							HMT351R7EFR8A-PB	FBGA(78ball)	2	30mm	CS : Jul'12
1333-999						HMT351R7CFR8A-H9	FBGA(78ball)	2	30mm	Now	
			HMT351R7EFR8A-H9			FBGA(78ball)	2	30mm	CS : Jul'12		
1066-777			HMT351R7CFR8A-G7			FBGA(78ball)	2	30mm	Now		
			HMT351R7EFR8A-G7			FBGA(78ball)	2	30mm	CS : Jul'12		
2GB			256Mx72	256Mx8	1600-111111	HMT325R7CFR8A-PB	FBGA(78ball)	1	30mm	Now	
						HMT325R7EFR8A-PB	FBGA(78ball)	1	30mm	CS : Jul'12	
						1333-999	HMT325R7CFR8A-H9	FBGA(78ball)	1	30mm	Now
	HMT325R7EFR8A-H9	FBGA(78ball)			1	30mm	CS : Jul'12				
		1066-777			HMT325R7CFR8A-G7	FBGA(78ball)	1	30mm	Now		
		HMT325R7EFR8A-G7			FBGA(78ball)	1	30mm	CS : Jul'12			



Computing Memory

DDR3 SDRAM : Module – VLP RDIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.		
	DENSITY	ORG.									
1.5V	16GB	2Gx72	2Gx4 (DDP)	1600-111111	HMT82GV7MMR4C-PB	FBGA(78ball)	2	18.75mm	Now		
				1333-999	HMT82GV7MMR4C-H9	FBGA(78ball)	2	18.75mm	Now		
				1066-777	HMT82GV7MMR4C-G7	FBGA(78ball)	2	18.75mm	Now		
	8GB	1Gx72	1Gx4	1Gx4	1600-111111	HMT41GV7MFR4C-PB	FBGA(78ball)	1	18.75mm	Now	
					1333-999	HMT41GV7MFR4C-H9	FBGA(78ball)	1	18.75mm	Now	
					1066-777	HMT41GV7MFR4C-G7	FBGA(78ball)	1	18.75mm	Now	
					1Gx4 (DDP)	1600-111111	HMT41GV7BMR4C-PB	FBGA(82ball)	2	18.75mm	Now
						1333-999	HMT41GV7BMR4C-H9	FBGA(82ball)	2	18.75mm	Now
						1066-777	HMT41GV7BMR4C-G7	FBGA(82ball)	2	18.75mm	Now
		512Mx8	1600-111111	HMT41GV7MFR8C-PB	FBGA(78ball)	2	18.75mm	Now			
			1333-999	HMT41GV7MFR8C-H9	FBGA(78ball)	2	18.75mm	Now			
			1066-777	HMT41GV7MFR8C-G7	FBGA(78ball)	2	18.75mm	Now			
		512Mx8 (DDP)	1333-999	HMT41GV7BMR8C-H9	FBGA(82ball)	4	18.75mm	Now			
			1066-777	HMT41GV7BMR8C-G7	FBGA(82ball)	4	18.75mm	Now			
			4GB	512Mx72	512Mx4	1866-131313	HMT351V7EFR4C-RD	FBGA(78ball)	1	18.75mm	CS : Jul'12
		1600-111111				HMT351V7CFR4C-PB	FBGA(78ball)	1	18.75mm	Now	
						HMT351V7EFR4C-PB	FBGA(78ball)	1	18.75mm	CS : Jul'12	
		1333-999				HMT351V7CFR4C-H9	FBGA(78ball)	1	18.75mm	Now	
		HMT351V7EFR4C-H9				FBGA(78ball)	1	18.75mm	CS : Jul'12		
	1066-777	HMT351V7CFR4C-G7				FBGA(78ball)	1	18.75mm	Now		
	256Mx8					1866-131313	HMT351V7EFR8C-RD	FBGA(78ball)	2	18.75mm	CS : Jul'12
		1600-111111			HMT351V7CFR8C-PB	FBGA(78ball)	2	18.75mm	Now		
					HMT351V7EFR8C-PB	FBGA(78ball)	2	18.75mm	CS : Jul'12		
		1333-999			HMT351V7CFR8C-H9	FBGA(78ball)	2	18.75mm	Now		
					HMT351V7EFR8C-H9	FBGA(78ball)	2	18.75mm	CS : Jul'12		
		1066-777			HMT351V7CFR8C-G7	FBGA(78ball)	2	18.75mm	Now		
	2GB	256Mx72	256Mx8		1866-131313	HMT325V7EFR8C-RD	FBGA(78ball)	1	18.75mm	CS : Jul'12	
				1600-111111	HMT325V7CFR8C-PB	FBGA(78ball)	1	18.75mm	Now		
					HMT325V7EFR8C-PB	FBGA(78ball)	1	18.75mm	CS : Jul'12		
				1333-999	HMT325V7CFR8C-H9	FBGA(78ball)	1	18.75mm	Now		
					HMT325V7EFR8C-H9	FBGA(78ball)	1	18.75mm	CS : Jul'12		
				1066-777	HMT325V7CFR8C-G7	FBGA(78ball)	1	18.75mm	Now		
			256Mx8 (DDP)			1600-111111	HMT325V7EFR8C-G7	FBGA(78ball)	1	18.75mm	CS : Jul'12
						HMT325V7CFR8C-PB	FBGA(78ball)	1	18.75mm	Now	
						HMT325V7EFR8C-PB	FBGA(78ball)	1	18.75mm	CS : Jul'12	
						1333-999	HMT325V7CFR8C-H9	FBGA(78ball)	1	18.75mm	Now
							HMT325V7EFR8C-H9	FBGA(78ball)	1	18.75mm	CS : Jul'12
						1066-777	HMT325V7CFR8C-G7	FBGA(78ball)	1	18.75mm	Now
1.35V	16GB	2Gx72	2Gx4 (DDP)	1600-111111	HMT82GV7MMR4A-PB	FBGA(78ball)	2	18.75mm	Now		
				1333-999	HMT82GV7MMR4A-H9	FBGA(78ball)	2	18.75mm	Now		
				1066-777	HMT82GV7MMR4A-G7	FBGA(78ball)	2	18.75mm	Now		
	8GB	1Gx72	1Gx4	1Gx4	1600-111111	HMT41GV7MFR4A-PB	FBGA(78ball)	1	18.75mm	Now	
					1333-999	HMT41GV7FRR4A-H9	FBGA(78ball)	1	18.75mm	Now	
					1066-777	HMT41GV7FRR4A-G7	FBGA(78ball)	1	18.75mm	Now	
					1Gx4 (DDP)	1333-999	HMT41GV7BMR4A-H9	FBGA(82ball)	2	18.75mm	Now
						1066-777	HMT41GV7BMR4A-G7	FBGA(82ball)	2	18.75mm	Now
						512Mx8	1600-111111	HMT41GV7MFR8A-PB	FBGA(78ball)	2	18.75mm
		1333-999	HMT41GV7MFR8A-H9	FBGA(78ball)	2		18.75mm	Now			
		1066-777	HMT41GV7MFR8A-G7	FBGA(78ball)	2		18.75mm	Now			
		512Mx8 (DDP)	1333-999	HMT41GV7BMR8A-H9	FBGA(82ball)	4	18.75mm	Now			
			1066-777	HMT41GV7BMR8A-G7	FBGA(82ball)	4	18.75mm	Now			
			4GB	512Mx72	512Mx4	1600-111111	HMT351V7CFR4C-PB	FBGA(78ball)	1	18.75mm	Now
						HMT351V7EFR4C-PB	FBGA(78ball)	1	18.75mm	CS : Jul'12	
		1333-999				HMT351V7CFR4C-H9	FBGA(78ball)	1	18.75mm	Now	
						HMT351V7EFR4C-H9	FBGA(78ball)	1	18.75mm	CS : Jul'12	
		1066-777				HMT351V7CFR4C-G7	FBGA(78ball)	1	18.75mm	Now	
		HMT351V7EFR4C-G7				FBGA(78ball)	1	18.75mm	CS : Jul'12		
	256Mx8					1600-111111	HMT351V7CFR8A-PB	FBGA(78ball)	2	18.75mm	Now
							HMT351V7EFR8A-PB	FBGA(78ball)	2	18.75mm	CS : Jul'12
		1333-999			HMT351V7CFR8A-H9	FBGA(78ball)	2	18.75mm	Now		
					HMT351V7EFR8A-H9	FBGA(78ball)	2	18.75mm	CS : Jul'12		
		1066-777			HMT351V7CFR8A-G7	FBGA(78ball)	2	18.75mm	Now		
					HMT351V7EFR8A-G7	FBGA(78ball)	2	18.75mm	CS : Jul'12		
	2GB	256Mx72	256Mx8	256Mx8	1600-111111	HMT325V7CFR8A-PB	FBGA(78ball)	1	18.75mm	Now	
						HMT325V7EFR8A-PB	FBGA(78ball)	1	18.75mm	CS : Jul'12	
					1333-999	HMT325V7CFR8A-H9	FBGA(78ball)	1	18.75mm	Now	
						HMT325V7EFR8A-H9	FBGA(78ball)	1	18.75mm	CS : Jul'12	
					1066-777	HMT325V7CFR8A-G7	FBGA(78ball)	1	18.75mm	Now	
						HMT325V7EFR8A-G7	FBGA(78ball)	1	18.75mm	CS : Jul'12	
						HMT325V7CFR8A-PB	FBGA(78ball)	1	18.75mm	Now	
						HMT325V7EFR8A-PB	FBGA(78ball)	1	18.75mm	CS : Jul'12	
					HMT325V7CFR8A-H9	FBGA(78ball)	1	18.75mm	Now		

Computing Memory

DDR3 SDRAM : Module - LRDIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	PACKAGE	RANK	HEIGHT	Availability
	DENSITY	ORG.							
1.5V	64GB	8Gx72	4Gx4 (QDP)	1600-111111	HMTA8GL7MHR4C-PB	FBGA(82ball)	4	30.35mm	CS : Jul'12
				1333-999	HMTA8GL7MHR4C-H9	FBGA(82ball)	4	30.35mm	CS : Jul'12
	32GB	4Gx72	2Gx4 (DDP)	1600-111111	HMT84GL7MMR4C-PB	FBGA(78ball)	4	30.35mm	CS
				1333-999	HMT84GL7MMR4C-H9	FBGA(78ball)	4	30.35mm	CS
1.35V	64GB	8Gx72	4Gx4 (QDP)	1333-999	HMTA8GL7MHR4A-H9	FBGA(82ball)	4	30.35mm	CS : Jul'12
	32GB	4Gx72	2Gx4 (DDP)	1333-999	HMT84GL7MMR4A-H9	FBGA(78ball)	4	30.35mm	CS



Computing Memory

DDR3 SDRAM : Module - SODIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.	
	DENSITY	ORG.								
1.5V	8GB	1Gx64	512Mx8	1600-111111	HMT41GS6MFR8C-PB	FBGA(78ball)	2	30mm	Now	
				1333-999	HMT41GS6MFR8C-H9	FBGA(78ball)	2	30mm	Now	
				1066-777	HMT41GS6MFR8C-G7	FBGA(78ball)	2	30mm	Now	
	4GB	512Mx64	256Mx8	1600-111111	HMT351S6CFR8C-PB	FBGA(78ball)	2	30mm	Now	
					HMT351S6EFR8C-PB	FBGA(78ball)	2	30mm	CS	
				1333--999	HMT351S6CFR8C-H9	FBGA(78ball)	2	30mm	Now	
					HMT351S6EFR8C-H9	FBGA(78ball)	2	30mm	CS	
				1066-777	HMT351S6CFR8C-G7	FBGA(78ball)	2	30mm	Now	
					HMT351S6EFR8C-G7	FBGA(78ball)	2	30mm	CS	
	512Mx8	1600-111111	HMT451S6MFR8C-PB	FBGA(78ball)	1	30mm	Now			
			1333-999	HMT451S6MFR8C-H9	FBGA(78ball)	1	30mm	Now		
			1066-777	HMT451S6MFR8C-G7	FBGA(78ball)	1	30mm	Now		
	2GB	256Mx64	256Mx8	1600-111111	HMT325S6CFR8C-PB	FBGA(78ball)	1	30mm	Now	
					HMT325S6EFR8C-PB	FBGA(78ball)	1	30mm	CS	
				1333-999	HMT325S6CFR8C-H9	FBGA(78ball)	1	30mm	Now	
					HMT325S6EFR8C-H9	FBGA(78ball)	1	30mm	CS	
				1066-777	HMT325S6CFR8C-G7	FBGA(78ball)	1	30mm	Now	
			HMT325S6EFR8C-G7		FBGA(78ball)	1	30mm	CS		
			128Mx16	1600-111111	HMT325S6DFR6C-PB	FBGA(96ball)	2	30mm	Now	
					1333-999	HMT325S6DFR6C-H9	FBGA(96ball)	2	30mm	Now
					1066-777	HMT325S6DFR6C-G7	FBGA(96ball)	2	30mm	Now
1GB	128Mx64	128Mx16	1600-111111	HMT312S6DFR6C-PB	FBGA(96ball)	1	30mm	Now		
				1333-999	HMT312S6DFR6C-H9	FBGA(96ball)	1	30mm	Now	
				1066-777	HMT312S6DFR6C-G7	FBGA(96ball)	1	30mm	Now	
1.35V	8GB	1Gx64	512Mx8	1600-111111	HMT41GS6MFR8A-PB	FBGA(78ball)	2	30mm	Now	
				1333-999	HMT41GS6MFR8A-H9	FBGA(78ball)	2	30mm	Now	
				1066-777	HMT41GS6MFR8A-G7	FBGA(78ball)	2	30mm	Now	
	4GB	512Mx64	256Mx8	1600-111111	HMT351S6CFR8A-PB	FBGA(78ball)	2	30mm	Now	
					HMT351S6EFR8A-PB	FBGA(78ball)	2	30mm	CS	
				1333--999	HMT351S6CFR8A-H9	FBGA(78ball)	2	30mm	Now	
					HMT351S6EFR8A-H9	FBGA(78ball)	2	30mm	CS	
				1066-777	HMT351S6CFR8A-G7	FBGA(78ball)	2	30mm	Now	
					HMT351S6EFR8A-G7	FBGA(78ball)	2	30mm	CS	
	512Mx8	1600-111111	HMT451S6MFR8A-PB	FBGA(78ball)	1	30mm	Now			
			1333-999	HMT451S6MFR8A-H9	FBGA(78ball)	1	30mm	Now		
			1066-777	HMT451S6MFR8A-G7	FBGA(78ball)	1	30mm	Now		
	2GB	256Mx64	256Mx8	1600-111111	HMT325S6CFR8A-PB	FBGA(78ball)	1	30mm	Now	
					HMT325S6EFR8A-PB	FBGA(78ball)	1	30mm	CS	
				1333-999	HMT325S6CFR8A-H9	FBGA(78ball)	1	30mm	Now	
					HMT325S6EFR8A-H9	FBGA(78ball)	1	30mm	CS	
				1066-777	HMT325S6CFR8A-G7	FBGA(78ball)	1	30mm	Now	
			HMT325S6EFR8A-G7		FBGA(78ball)	1	30mm	CS		
			128Mx16	1600-111111	HMT325S6DFR6A-PB	FBGA(96ball)	2	30mm	Now	
					1333-999	HMT325S6DFR6A-H9	FBGA(96ball)	2	30mm	Now
					1066-777	HMT325S6DFR6A-G7	FBGA(96ball)	2	30mm	Now
1GB	128Mx64	128Mx16	1600-111111	HMT312S6DFR6A-PB	FBGA(96ball)	1	30mm	Now		
				1333-999	HMT312S6DFR6A-H9	FBGA(96ball)	1	30mm	Now	
				1066-777	HMT312S6DFR6A-G7	FBGA(96ball)	1	30mm	Now	



Computing Memory

DDR2 SDRAM : Module - UBDIMM

VDD	MODULE		BASED COM.	SPEED	PART NUMBER	COMPONENT PKG.	#OF RANK	HEIGHT	AVAIL.
	DENSITY	ORG.							
1.8V	2GB	256Mx64	128Mx8	DDR2 800-555	HMP125U6EFR8C-S5	FBGA(60ball)	2	30mm	Now
				DDR2 667-555	HMP125U6EFR8C-Y5	FBGA(60ball)	2	30mm	Now
				DDR2 533-444	HMP125U6EFR8C-C4	FBGA(60ball)	2	30mm	Now
	1GB	128Mx64	128Mx8	DDR2 800-555	HMP112U6EFR8C-S5	FBGA(60ball)	1	30mm	Now
				DDR2 667-555	HMP112U6EFR8C-Y5	FBGA(60ball)	1	30mm	Now
				DDR2 533-444	HMP112U6EFR8C-C4	FBGA(60ball)	1	30mm	Now

Computing Memory

DDR2 SDRAM : Module - SODIMM

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



Consumer & Network Memory

SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
256Mb	32M x 8	166MHz	H57V2582GTR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
		133MHz	H57V2582GTR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
	16M x 16	200MHz	H57V2562GTR-50C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
		166MHz	H57V2562GTR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
			H57V2562GFR-60C(I/L)	FBGA(54ball)	4Bank,3.3V	Now
		143MHz	H57V2562GTR-70C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
			H57V2562GFR-70C(I/L)	FBGA(54ball)	4Bank,3.3V	Now
		133MHz	H57V2562GTR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
			H57V2562GFR-75C(I/L)	FBGA(54ball)	4Bank,3.3V	Now
		8M x 32	166MHz	H57V2622GMR-60C	FBGA(90ball)	4Bank,3.3V
	133MHz		H57V2622GMR-75C	FBGA(90ball)	4Bank,3.3V	Now
	128Mb	8M x 16	200MHz	H57V1262GTR-50C(I/L)	TSOPII(54pin)	4Bank,3.3V
H57V1262GFR-50C(I/L)				FBGA(54ball)	4Bank,3.3V	Now
166MHz			H57V1262GTR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
			H57V1262GFR-60C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
143MHz			H57V1262GTR-70C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
			H57V1262GFR-70C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
133MHz			H57V1262GTR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now
			H57V1262GFR-75C(I/L)	TSOPII(54pin)	4Bank,3.3V	Now



Consumer & Network Memory

DDR SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
512Mb	64MX8	DDR 400	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	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	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	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	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	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 400	H5DU2582GTR-E3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, 3-3-3	Now	
		DDR 333	H5DU2582GTR-J3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
		DDR 266	H5DU2582GTR-K3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
	16Mx16	DDR 500	H5DU2562GTR-FAC(I/L)	TSOPII(66pin)	4Bank, 2.5V, 4-4-4	Now	
			DDR 400	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	
		DDR 333	H5DU2562GTR-J3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
			H5DU2562GFR-J3C(I/L)	FBGA(60ball)	4Bank, 2.5V, CL2.5	Now	
		DDR 266	H5DU2562GTR-K3C(I/L)	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	
	H5DU2562GFR-K3C(I/L)		FBGA(60ball)	4Bank, 2.5V, CL2.5	Now		
	128Mb	8Mx16	DDR 500	H5DU1262GTR-FBC	TSOPII(66pin)	4Bank, 2.5V, 4-3-3	Now
			DDR 400	H5DU1262GTR-E3C	TSOPII(66pin)	4Bank, 2.5V, 3-3-3	Now
DDR 333			H5DU1262GTR-J3C	TSOPII(66pin)	4Bank, 2.5V, CL2.5	Now	



Consumer & Network Memory

DDR2 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1Gb	128Mx8	DDR2 1066	H5PS1G83EFR-G7	FBGA(60ball)	8Bank, 1.8V, 7-7-7	Now
			H5PS1G83JFR-G7	FBGA(60ball)	8Bank, 1.8V, 7-7-7	Now
		DDR2 800	HY5PS1G831CFP-S5	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now
			H5PS1G83EFR-S5	FBGA(60ball)	8Bank, 1.8V, 5-5-5	Now
			H5PS1G83JFR-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
			H5PS1G83JFR-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
			H5PS1G43JFR-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
			H5PS1G63JFR-G7	FBGA(84ball)	8Bank, 1.8V, 7-7-7	Now
		DDR2 800	H5PS1G63EFR-G7	FBGA(84ball)	8Bank, 1.8V, 7-7-7	Now
			H5PS1G63EFR-S5	FBGA(84ball)	8Bank, 1.8V, 5-5-5	Now
			H5PS1G63JFR-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
			H5PS1G63JFR-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	EOL
		DDR2 800	H5PS1GC2FMR-S6	FBGA(128ball)	8Bank, 1.8V, 6-6-6	EOL
512Mb	64Mx8	DDR2 1066	H5PS5182GFR-G7	FBGA(60ball)	4Bank, 1.8V, 7-7-7	Now
			H5PS5182FFP-S5	FBGA(60ball)	4Bank, 1.8V, 5-5-5	EOL
		DDR2 800	H5PS5182GFR-S5	FBGA(60ball)	4Bank, 1.8V, 5-5-5	Now
			H5PS5182FFP-Y5	FBGA(60ball)	4Bank, 1.8V, 5-5-5	EOL
	32Mx16	DDR2 1066	H5PS5162FFR-G7	FBGA(84ball)	4Bank, 1.8V, 7-7-7	EOL
			H5PS5162GFR-G7	FBGA(84ball)	4Bank, 1.8V, 7-7-7	Now
		DDR2 800	H5PS5162FFR-S6	FBGA(84ball)	4Bank, 1.8V, 6-6-6	EOL
			H5PS5162GFR-S6	FBGA(84ball)	4Bank, 1.8V, 6-6-6	Now
	H5PS5162FFR-S5		FBGA(84ball)	4Bank, 1.8V, 5-5-5	EOL	
	DDR2 667	H5PS5162GFR-S5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	Now	
		H5PS5162FFR-Y5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	EOL	
	256Mb	16Mx16	DDR2 1066	H5PS2562GFR-G7	FBGA(84ball)	4Bank, 1.8V, 7-7-7
DDR2 800			H5PS2562GFR-S6	FBGA(84ball)	4Bank, 1.8V, 6-6-6	Now
DDR2 667			H5PS2562GFR-Y5	FBGA(84ball)	4Bank, 1.8V, 5-5-5	Now



Consumer & Network Memory

DDR3 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.	
4Gb	512Mx8	DDR3 2133	H5TQ4G83AFR-TEC	FBGA(78ball)	8Bank, 1.5V, CL14,14-14-14	CS:Jul'12	
			H5TQ4G83AFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	CS:Jul'12	
		DDR3 1866	H5TQ4G83MFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	Now	
			H5TC4G83MFR-RDC	FBGA(78ball)	8Bank, 1.35V, CL13,13-13-13	Now	
			H5TQ4G83AFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	CS:Jul'12	
		DDR3 1600	H5TQ4G83MFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			H5TC4G83MFR-PBC	FBGA(78ball)	8Bank, 1.35V, CL11,11-11-11	Now	
			H5TQ4G83AFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	CS:Jul'12	
		DDR3 1333	H5TQ4G83MFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			H5TC4G83MFR-H9C	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
			H5TQ4G83AFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	CS:Jul'12	
		DDR3 1066	H5TQ4G83MFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
	H5TC4G83MFR-G7C		FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now		
	H5TQ4G63AFR-TEC		FBGA(96ball)	8Bank, 1.5V, CL14,14-14-14	CS:Jul'12		
	256x16	DDR3 2133	H5TQ4G63AFR-RDC	FBGA(96ball)	8Bank, 1.5V, CL13,13-13-13	CS:Jul'12	
			H5TQ4G63MFR-RDC	FBGA(96ball)	8Bank, 1.5V, CL13,13-13-13	Now	
			H5TC4G63MFR-RDC	FBGA(96ball)	8Bank, 1.35V, CL13,13-13-13	Now	
		DDR3 1600	H5TQ4G63AFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	CS:Jul'12	
			H5TQ4G63MFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			H5TC4G63MFR-PBC	FBGA(96ball)	8Bank, 1.35V, CL11,11-11-11	Now	
		DDR3 1333	H5TQ4G63AFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	CS:Jul'12	
			H5TQ4G63MFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			H5TC4G63MFR-H9C	FBGA(96ball)	8Bank, 1.35V, CL9,9-9-9	Now	
		DDR3 1066	H5TQ4G63AFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	CS:Jul'12	
H5TQ4G63MFR-G7C			FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now		
H5TC4G63MFR-G7C			FBGA(96ball)	8Bank, 1.35V, CL7,7-7-7	Now		
2Gb	256Mx8	DDR3 2133	H5TQ2G83BFR-TEC	FBGA(82ball)	8Bank, 1.5V, CL14,14-14-14	Now	
			H5TQ2G83DFR-TEC	FBGA(78ball)	8Bank, 1.5V, CL14,14-14-14	Now	
		DDR3 1866	H5TQ2G83BFR-RDC	FBGA(82ball)	8Bank, 1.5V, CL13,13-13-13	Now	
			H5TQ2G83DFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	Now	
			H5TC2G83DFR-RDC	FBGA(78ball)	8Bank, 1.35V, CL13,13-13-13	Now	
		DDR3 1600	H5TQ2G83BFR-PBC	FBGA(82ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			H5TQ2G83DFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			H5TC2G83DFR-PBC	FBGA(78ball)	8Bank, 1.35V, CL11,11-11-11	Now	
		DDR3 1333	H5TQ2G83BFR-H9C	FBGA(82ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			H5TQ2G83DFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			H5TC2G83DFR-H9C	FBGA(78ball)	8Bank, 1.35V, CL9,9-9-9	Now	
		DDR3 1066	H5TQ2G83BFR-G7C	FBGA(82ball)	8Bank, 1.5V, CL7,7-7-7	Now	
			H5TQ2G83DFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now	
			H5TC2G83DFR-G7C	FBGA(78ball)	8Bank, 1.35V, CL7,7-7-7	Now	
		128x16	DDR3 2133	H5TQ2G63BFR-TEC	FBGA(96ball)	8Bank, 1.5V, CL14,14-14-14	Now
				H5TQ2G63DFR-TEC	FBGA(96ball)	8Bank, 1.5V, CL14,14-14-14	Now
				H5TQ2G63BFR-RDC	FBGA(96ball)	8Bank, 1.5V, CL13,13-13-13	Now
			DDR3 1866	H5TQ2G63DFR-RDC	FBGA(96ball)	8Bank, 1.5V, CL13,13-13-13	Now
	H5TC2G63DFR-RDC			FBGA(96ball)	8Bank, 1.35V, CL13,13-13-13	Now	
	H5TQ2G63BFR-PBC			FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	Now	
	DDR3 1600		H5TQ2G63DFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	Now	
			H5TC2G63DFR-PBC	FBGA(96ball)	8Bank, 1.35V, CL11,11-11-11	Now	
			H5TQ2G63BFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now	
	DDR3 1333		H5TQ2G63DFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now	
			H5TC2G63DFR-H9C	FBGA(96ball)	8Bank, 1.35V, CL9,9-9-9	Now	
			H5TQ2G63BFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now	
	DDR3 1066		H5TQ2G63DFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now	
			H5TC2G63DFR-G7C	FBGA(96ball)	8Bank, 1.35V, CL7,7-7-7	Now	



Consumer & Network Memory

DDR3 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
1Gb	128Mx8	DDR3 2133	H5TQ1G83EFR-TEC	FBGA(78ball)	8Bank, 1.5V, CL14,14-14-14	CS:Jun'12
			H5TQ1G83DFR-TEC	FBGA(78ball)	8Bank, 1.5V, CL14,14-14-14	Now
		DDR3 1866	H5TQ1G83EFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	CS:Jun'12
			H5TQ1G83DFR-RDC	FBGA(78ball)	8Bank, 1.5V, CL13,13-13-13	Now
		DDR3 1600	H5TQ1G83EFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	CS:Jun'12
			H5TQ1G83DFR-PBC	FBGA(78ball)	8Bank, 1.5V, CL11,11-11-11	Now
		DDR3 1333	H5TQ1G83EFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	CS:Jun'12
			H5TQ1G83BFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now
			H5TQ1G83DFR-H9C	FBGA(78ball)	8Bank, 1.5V, CL9,9-9-9	Now
		DDR3 1066	H5TQ1G83EFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	CS:Jun'12
			H5TQ1G83BFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now
			H5TQ1G83DFR-G7C	FBGA(78ball)	8Bank, 1.5V, CL7,7-7-7	Now
	64Mx16	DDR3 2133	H5TQ1G63EFR-TEC	FBGA(96ball)	8Bank, 1.5V, CL14,14-14-14	CS:Jun'12
			H5TQ1G63DFR-TEC	FBGA(96ball)	8Bank, 1.5V, CL14,14-14-14	Now
		DDR3 1866	H5TQ1G63EFR-RDC	FBGA(96ball)	8Bank, 1.5V, CL13,13-13-13	CS:Jun'12
			H5TQ1G63DFR-RDC	FBGA(96ball)	8Bank, 1.5V, CL13,13-13-13	Now
		DDR3 1600	H5TQ1G63EFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	CS:Jun'12
			H5TQ1G63DFR-PBC	FBGA(96ball)	8Bank, 1.5V, CL11,11-11-11	Now
		DDR3 1333	H5TQ1G63EFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	CS:Jun'12
			H5TQ1G63BFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now
			H5TQ1G63DFR-H9C	FBGA(96ball)	8Bank, 1.5V, CL9,9-9-9	Now
		DDR3 1066	H5TQ1G63EFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	CS:Jun'12
			H5TQ1G63BFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now
			H5TQ1G63DFR-G7C	FBGA(96ball)	8Bank, 1.5V, CL7,7-7-7	Now



Graphics Memory

DDR3 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
4Gb	256Mx16	1.1GHz (0.9ns)	H5TQ4G63AFR-N1C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q3'12
		1.0GHz (1.0ns)	H5TQ4G63AFR-N0C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q3'12
		900MHz (1.1ns)	H5TQ4G63AFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q3'12
		900MHz (1.1ns)	H5TQ4G63MFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		800MHz (1.2ns)	H5TQ4G63MFR-12C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
2Gb	128Mx16	1.2GHz (0.8ns)	H5TQ2G63FFR-N2C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q4'12
		1.1GHz (0.9ns)	H5TQ2G63FFR-N1C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q4'12
		1.0GHz (1.0ns)	H5TQ2G63FFR-N0C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q4'12
		900MHz (1.1ns)	H5TQ2G63FFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q4'12
		1.2GHz (0.8ns)	H5TQ2G63DFR-N2C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		1.1GHz (0.9ns)	H5TQ2G63DFR-N1C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		1.0GHz (1.0ns)	H5TQ2G63DFR-N0C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		900MHz (1.1ns)	H5TQ2G63DFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		900MHz (1.1ns)	H5TC2G63DFR-11C	FBGA(96ball)	8Bank, 1.35V/1.35V	Now
		800MHz (1.2ns)	H5TC2G63DFR-12C	FBGA(96ball)	8Bank, 1.35V/1.35V	Now
		1.0GHz (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	1.1GHz (0.9ns)	H5TQ1G63EFR-N1C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q3'12
		1.0GHz (1.0ns)	H5TQ1G63EFR-N0C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q3'12
		900MHz (1.1ns)	H5TQ1G63EFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	CS: Q3'12
		1.1GHz (0.9ns)	H5TQ1G63DFR-N1C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		1.0GHz (1.0ns)	H5TQ1G63DFR-N0C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		900MHz (1.1ns)	H5TQ1G63DFR-11C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now
		800MHz (1.2ns)	H5TQ1G63DFR-12C	FBGA(96ball)	8Bank, 1.5V/1.5V	Now



Graphics Memory

GDDR5 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
4Gb	128Mx32	7.0Gbps	H5GQ4H24MFR-R2C	FBGA(170ball)	16Bank, 1.5V/1.5V	CS: Q1'13
		6.0Gbps	H5GQ4H24MFR-R0C	FBGA(170ball)	16Bank, 1.5V/1.5V	CS: Q1'13
		5.0Gbps	H5GQ4H24MFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	CS: Q1'13
2Gb	64Mx32	7.0Gbps	H5GQ2H24AFR-R2C	FBGA(170ball)	16Bank, 1.6V/1.6V	Now
		6.0Gbps	H5GQ2H24AFR-R0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		5.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		5.0Gbps	H5GQ2H24AFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		4.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		4.0Gbps	H5GQ2H24AFR-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		6.0Gbps	H5GQ2H24MFR-R0C	FBGA(170ball)	16Bank, 1.6V/1.6V	Now
		4.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		5.0Gbps	H5GQ2H24MFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		3.6Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		4.0Gbps	H5GQ2H24MFR-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		1Gb	32Mx32	6.0Gbps	H5GQ1H24BFR-R0C	FBGA(170ball)
4.0Gbps	FBGA(170ball)			16Bank, 1.35V/1.35V		Now
5.0Gbps	H5GQ1H24BFR-T2C			FBGA(170ball)	16Bank, 1.5V/1.5V	Now
3.6Gbps				FBGA(170ball)	16Bank, 1.35V/1.35V	Now
4.0Gbps	H5GQ1H24BFR-T0C			FBGA(170ball)	16Bank, 1.5V/1.5V	Now



Graphics Memory

GDDR5 SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
4Gb	128Mx32	7.0Gbps	H5GQ4H24MFR-R2C	FBGA(170ball)	16Bank, 1.5V/1.5V	CS: Q1'13
		6.0Gbps	H5GQ4H24MFR-R0C	FBGA(170ball)	16Bank, 1.5V/1.5V	CS: Q1'13
		5.0Gbps	H5GQ4H24MFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	CS: Q1'13
2Gb	64Mx32	7.0Gbps	H5GQ2H24AFR-R2C	FBGA(170ball)	16Bank, 1.6V/1.6V	Now
		6.0Gbps	H5GQ2H24AFR-R0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		5.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		5.0Gbps	H5GQ2H24AFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		4.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		4.0Gbps	H5GQ2H24AFR-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		6.0Gbps	H5GQ2H24MFR-R0C	FBGA(170ball)	16Bank, 1.6V/1.6V	Now
		4.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		5.0Gbps	H5GQ2H24MFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		3.6Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		4.0Gbps	H5GQ2H24MFR-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
1Gb	32Mx32	6.0Gbps	H5GQ1H24BFR-R0C	FBGA(170ball)	16Bank, 1.6V/1.6V	Now
		4.0Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		5.0Gbps	H5GQ1H24BFR-T2C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now
		3.6Gbps		FBGA(170ball)	16Bank, 1.35V/1.35V	Now
		4.0Gbps	H5GQ1H24BFR-T0C	FBGA(170ball)	16Bank, 1.5V/1.5V	Now



Graphics Memory

GDDR5M SDRAM

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
4Gb	128Mx32	4.0Gbps	H5HC4H63MFR-T0C	FBGA(96ball)	8Bank, 1.35V/1.35V	CS: Q4'12
		3.6Gbps	H5HC4H63MFR-N8C	FBGA(96ball)	8Bank, 1.35V/1.35V	CS: Q4'12
		3.2Gbps	H5HC4H63MFR-N6C	FBGA(96ball)	8Bank, 1.35V/1.35V	CS: Q4'12



Mobile Memory

Mobile SDR

DENSITY	ORG.	SPEED	PART NUMBER	Package	FEATURE	Availability	
2Gb	64M x 16	166MHz	H55S1G62MFP-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G62MFP-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32	166MHz	H55S1G22MFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G22MFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32 (reduced page size)	166MHz	H55S1G32MFP-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G32MFP-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
1Gb	64M x 16	166MHz	H55S1G62MFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G62MFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		166MHz	H55S1G62AFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G62AFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32	166MHz	H55S1G22MFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G22MFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz	H55S1G22AFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G22AFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	32M x 32 (reduced page size)	166MHz	H55S1G32MFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G32MFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz	H55S1G32AFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S1G32AFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
	512M	32M x 16	166MHz	H55S5162DFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
			133MHz	H55S5162DFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
166MHz			H55S5162EFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
133MHz			H55S5162EFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now	
16M x 32		166MHz	H55S5122DFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S5122DFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz	H55S5122EFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S5122EFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
16M x 32 (reduced page size)		166MHz	H55S5132DFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S5132DFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		166MHz	H55S5132EFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	
		133MHz	H55S5132EFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now	



Mobile Memory

Mobile SDR

DENSITY	ORG.	SPEED	PART NUMBER	Package	FEATURE	Availability
256Mb	16M x 16	166MHz	H55S2562JFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
		133MHz	H55S2562JFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
		166MHz	H55S2562NFR-60M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
		133MHz	H55S2562NFR-75M	FBGA(54ball)	4Bank, 1.8V/1.8V	Now
	8M x 32	166MHz	H55S2622JFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		133MHz	H55S2622JFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		166MHz	H55S2622NFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		133MHz	H55S2622NFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
	8M x 32 (reduced page size)	166MHz	H55S2532JFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		133MHz	H55S2532JFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		166MHz	H55S2532NFR-60M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		133MHz	H55S2532NFR-75M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now

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



Mobile Memory

Mobile DDR

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
2Gb	64M x 16	DDR400	H5MS2G62MFR-EBM	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2G62MFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS2G62AFR-EBM	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2G62AFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
	32M x 32	DDR400	H5MS2G22MFR-EBM	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2G22MFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS2G22AFR-EBM	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2G22AFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
	32M x 32 (reduced page size)	DDR400	H5MS2G32MFR-EBM	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2G32MFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS2G32AFR-EBM	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2G32AFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
1Gb	64M x 16	DDR400	H5MS1G62AFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS1G62AFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS1G62BFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS1G62BFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
	32M x 32	DDR400	H5MS1G22AFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS1G22AFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS1G22BFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS1G22BFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
	32M x 32 (reduced page size)	DDR400	H5MS1G32AFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS1G32AFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS1G32BFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS1G32BFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now



Mobile Memory

Mobile DDR

DENSITY	ORG.	SPEED	PART NUMBER	Package	FEATURE	Availability
512Mb	32M x 16	DDR400	H5MS5162DFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5162DFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS5162EFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5162EFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS5162FFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5162FFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
	16M x 32	DDR400	H5MS5122DFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5122DFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS5122EFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5122EFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS5122FFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5122FFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
	16M x 32 (reduced page size)	DDR400	H5MS5132DFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5132DFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS5132EFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5132EFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS5132FFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS5132FFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
256Mb	16M x 16	DDR400	H5MS2562JFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2562JFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS2562NFR-E3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2562NFR-J3M	FBGA(60ball)	4Bank, 1.8V/1.8V	Now
	8M x 32	DDR400	H5MS2622JFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2622JFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS2622NFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2622NFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
	8M x 32 (reduced page size)	DDR400	H5MS2532JFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2532JFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR400	H5MS2532NFR-E3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now
		DDR333	H5MS2532NFR-J3M	FBGA(90ball)	4Bank, 1.8V/1.8V	Now

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



Mobile Memory

LP DDR2

DENSITY	ORG.	SPEED	PART NUMBER	PKG.	FEATURE	AVAIL.
4Gb	64M x 32	DDR2-1066	H9TKNNN4GDMPLR-NGM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	ES
		DDR2-800	H9TKNNN4GDMPLR-NDM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	ES
2Gb	64M x 32	DDR2-1066	H9TKNNN2GDAPLR-NGM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	Now
		DDR2-800	H9TKNNN2GDAPLR-NDM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	Now
		DDR2-800	H9TKNNN2GDMPLR-NDM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	Now
		DDR2-667	H9TKNNN2GDMPLR-NYM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	Now
1Gb	64M x32	DDR2-800	H9TKNNN1GDAPLR-NDM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	Now
		DDR2-667	H9TKNNN1GDAPLR-NYM	FBGA(168ball)	8Bank, 1.8V/1.2V/1.2V	Now

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



NAND Flash SLC COMPONENT

Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Availability	Remark
HY27US08281A	9xnm class	128Mb	16KB	SDP	3.3v/X8	TSOP/USOP	Now	
HY27US08561A	9xnm class	256Mb	16KB	SDP	3.3v/X8	TSOP/USOP/FBGA	Now	
H27U518S2C	5xnm class	512Mb	16KB	SDP	3.3v/X8	TSOP	Now	
HY27UF081G2A	7xnm class	1Gb	128KB	SDP	3.3v/X8	TSOP/FBGA	Now	
HY27SF081G2A	7xnm class	1Gb	128KB	SDP	1.8v/X8	FBGA	Now	
H27U1G8F2B	4xnm class	1Gb	128KB	SDP	3.3v/X8	TSOP/FBGA	Now	
H27S1G8F2B	4xnm class	1Gb	128KB	SDP	1.8v/X8	TSOP/FBGA	Now	
H27U1G8F2C	3xnm class	1Gb	128KB	SDP	3.3v/X8	TSOP	Now	
HY27UF082G2B	5xnm class	2Gb	128KB	SDP	3.3v/X8	TSOP/FBGA/LGA	Now	
H27U2G8F2C	4ynm class	2Gb	128KB	SDP	3.3v/X8	TSOP	Now	
HY27UF084G2B	5xnm class	4Gb	128KB	SDP	3.3v/X8	TSOP	Now	
H27U4G8F2D	4ynm class	4Gb	128KB	SDP	3.3v/X8	TSOP	Now	
H27U4G8F2E	3xnm class	4Gb	128KB	SDP	3.3v/X8	TSOP	Q2 '12	
H27U8G8G5D	4ynm class	8Gb	128KB	DDP	3.3v/X8	TSOP	Now	
H27QBG8GDA	3xnm class	32Gb	512KB	DDP	1.8v/x8	VFPGA	Now	2CE/Dual CH.
H27QCG8HEA	3xnm class	64Gb	512KB	QDP	1.8v/x8	VFPGA	Now	4CE/Dual CH.



NAND Flash

SLC / MLC

NAND Flash MLC COMPONENT

Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Availability	Remark
H27UCG8T2M	2xnm class	64Gb	2MB(8KB Page)	SDP	3.3v/x8	VLGA	Now	
H27UAG8T2B	3xnm class	16Gb	2MB(8KB Page)	SDP	3.3v/x8	TSOP	Now	
H27UBG8T2B	2xnm class	32Gb	2MB(8KB Page)	SDP	3.3v/x8	TSOP	Now	
H27UCG8U2B	2xnm class	64Gb	2MB(8KB Page)	DDP	3.3v/x8	TSOP	Now	
H27QCG8UDB	2xnm class	64Gb	2MB(8KB Page)	DDP	3.3v/x8	FBGA-100	Q2 '12	HS(ONFi2.2)
H27QDG8VEB	2xnm class	128Gb	2MB(8KB Page)	QDP	3.3v/x8	FBGA-100	Q2 '12	HS(ONFi2.2)
H27QEG8YEB	2xnm class	256Gb	2MB(8KB Page)	ODP	3.3v/x8	FBGA-100	Q2 '12	HS(ONFi2.2)
H27UCG8T2A	2ynm class	64Gb	2MB(8KB Page)	SDP	3.3v/X8	TSOP	Now	
H27UCG8T2B	2ynm class	64Gb	4MB(16KB Page)	SDP	3.3v/X8	VLGA/FBGA-132	Q2 '12	
H27UBG8T2C	2ynm class	32Gb	2MB(8KB Page)	SDP	3.3v/X8	TSOP	Q2 '12	
H27UAG8T2C	2ynm class	16Gb	2MB(8KB Page)	SDP	3.3v/X8	TSOP	Q3 '12	
H27QDG8UDB	2ynm class	128Gb	4MB(16KB Page)	DDP	3.3v/x8	FBGA-132	Q2 '12	HS(ONFi3.0)
H27QEG8VEB	2ynm class	256Gb	4MB(16KB Page)	QDP	3.3v/x8	FBGA-132	Q2 '12	HS(ONFi3.0)
H27QFG8YEB	2ynm class	512Gb	4MB(16KB Page)	ODP	3.3v/x8	FBGA-132	Q2' 12	HS(ONFi3.0)



NAND Flash

eMMC (eNAND)

Product	Density	Base Component			Vcc/Org	Version	Availability	Remark
		Tech.	Density	Stack				
H26M3A001AMR	512MB	4ynm class	4Gb	1	3.3V/x8/x4	MMC4.41	Now	
H26M3B001MMR	1GB	4ynm class	4Gb	2	3.3V/x8/x4	MMC4.41	Now	
H26M21001ECR	2GB	3xnm class	16Gb	1	3.3V/x8/x4	MMC4.41	Now	
H26M21001FPR	2GB	2ynm class	16Gb	1	3.3V/x8/x4	MMC4.41	Q3 '12	
H26M31001FPR	4GB	2xnm class	32Gb	1	3.3V/x8/x4	MMC4.41	Now	
H26M31002GPR	4GB	2ynm class	32Gb	1	3.3V/x8/x4	MMC4.41	Q2 '12	
H26M42001FMR	8GB	2xnm class	32Gb	2	3.3V/x8/x4	MMC4.41	Now	
H26M42002GMR	8GB	2ynm class	32Gb	2	3.3V/x8/x4	MMC4.41	Q2 '12	
H26M52002CKR	16GB	2xnm class	64Gb	2	3.3V/x8/x4	MMC4.41	Now	
H26M54001DQR	16GB	2xnm class	32Gb	4	3.3V/x8/x4	MMC4.41	Now	
H26M52002EQR	16GB	2ynm class	64Gb	2	3.3V/x8/x4	MMC4.41	Q2 '12	
H26M54002EMR	16GB	2ynm class	32Gb	4	3.3V/x8/x4	MMC4.41	Q3 '12	
H26M64002BNR	32GB	2xnm class	64Gb	4	3.3V/x8/x4	MMC4.41	Now	
H26M68001CFR	32GB	2xnm class	32Gb	8	3.3V/x8/x4	MMC4.41	Now	
H26M64002DQR	32GB	2ynm class	64Gb	4	3.3V/x8/x4	MMC4.41	Q2 '12	
H26M68002DCR	32GB	2ynm class	32Gb	8	3.3V/x8/x4	MMC4.41	Q3 '12	
H26M78002ANR	64GB	2xnm class	64Gb	8	3.3V/x8/x4	MMC4.41	Now	
H26M78002BFR	64GB	2ynm class	64Gb	8	3.3V/x8/x4	MMC4.41	Q3 '12	



NAND Flash

uSD / E2NAND2.0

uSD Component

Product	Density	Base Component			Vcc/Bus	Version	Availability	Remark
		Tech.	Density	Stack				
H24U2GTM1DRH	2GB	3xnm class	16Gb	1	3.3v/x4	Class-6	Now	

E2NAND2.0

Product	Tech	Density	Block Size	Stack	Vcc/Org	Package	Availability	Remark
H2DTDG8UD1MYR	2xnm class	128Gb	2MB(8KB Page)	2	3.3v/X8	VLGA	Now	
H2DQEG8VD1MYR	2xnm class	256Gb	2MB(8KB Page)	4	3.3v/X8	VLGA	Now	
H2DQFG8YD1MYR	2xnm class	512Gb	2MB(8KB Page)	8	3.3v/X8	VLGA	Now	



		VGA			1.0M	1.3M
Part Number		YACBAC1S	YACBA21S	YACBAD1S	YACY611C	YACC6A1S
Optical Format		1/10-inch	1/10-inch	1/10-inch	1/5.5-inch	1/6-inch
Pixel Size		2.25um x 2.25um	2.25um x 2.25um	2.25um x 2.25um	2.0um x 2.0um	1.75um x 1.75um
Active Array Format		640H x 480V	640H x 480V	640H x 480V	1280H x 800V	1280H x 1024V
Frame Rate		30-fps @full resolution	30-fps @full resolution	30-fps @full resolution	30-fps @full resolution 30-fps @ 720P	15fps @full resolution
Type		SOC	SOC	SOC	RAW	SOC
Output Format		YUV4:2:2 RGB5:6:5 RGB4:4:4	YUV4:2:2 RGB5:6:5 RGB4:4:4	YUV4:2:2 RGB5:6:5 RGB4:4:4	RAW 8bit, 10bit	YUV4:2:2 RGB5:6:5 ITU656-like
Supply Voltage	Digital I/O	1.7V-3.0V (1.8V/2.8V)	1.7V-3.0V (1.8V/2.8V)	1.7V-3.0V (1.8V/2.8V)	1.7V-3.0V (1.8V/2.8V)	1.7V-3.0V (1.8V/2.8V)
	Digital Core	1.7V-1.9V (1.8V)	1.7V-1.9V (1.8V)	1.7V-1.9V (1.8V)	1.7V-1.9V (1.8V)	1.7V-1.9V (1.8V)
	Analog & Pixel	2.7V-3.0V (2.8V)	2.7V-3.0V (2.8V)	2.7V-3.0V (2.8V)	2.7V-3.0V (2.8V)	2.7V-3.0V (2.8V)
Operating Temp.		-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Status		Mass Production	Mass Production	Mass Production	Mass Production	Mass Production
Packaging		Bare Die (COB) Recon. Wafer NeoPAC CSP	Bare Die (COB) ShellUT CSP	Bare Die (COB) Recon. Wafer NeoPAC CSP	Bare Die (COB) ShellUT CSP NeoPAC CSP	Bare die (COB) Recon. Wafer NeoPAC CSP
Interface		Parallel	Parallel	MIPI	Parallel	Parallel

		2M		3M		5M
Part Number		YACD511S	YACD5C1S	YACE4B1S	YACE5B1S	YACF4B1C
Optical Format		1/5-inch	1/5-inch	1/4-inch	1/5-inch	1/4-inch
Pixel Size		1.75um x 1.75um	1.75um x 1.75um	1.75um x 1.75um	1.4um x 1.4um	1.4um x 1.4um
Active Array Format		1600H x 1200V	1600H x 1200V	2048H x 1536V	2048H x 1536V	2592H x 1944V
Frame Rate		15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution
Type		SOC	SOC	SOC	SOC	RAW
Output Format		YUV4:2:2 RGB5:6:5 ITU656-like	YUV4:2:2 RGB5:6:5 ITU656-like	YUV4:2:2 RGB5:6:5 RGB6:6:6	YUV422,RGB565,RGB666, ITU656-like, Bayer 8bit/10bit,	RAW 8bit, 10bit
Supply Voltage	Digital I/O	1.7V – 3.0V	1.7V – 3.0V	1.7V – 3.0V	1.7V – 3.0V	1.7V - 3.0V
	Digital Core	1.7V – 1.9V	1.7V – 1.9V	1.7V – 1.9V	1.1V - 1.3V	1.2V / 1.5V / 1.8V
	Analog & Pixel	2.7V – 3.0V	2.7V – 3.0V	2.7V – 3.0V	2.7V – 3.0V	2.7V - 3.0V
Operating Temp.		-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Status		Mass Production	Mass Production	Mass Production	Mass Production	Mass Production
Packaging		Bare die (COB) ShellUT CSP	Bare die (COB) ShellUT CSP	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer
Interface		Parallel	Parallel / MIPI	Parallel	Parallel / MIPI	Parallel / MIPI