Q1' 2013 DATABOOK

SK hynix

Rev 0.2

		VGA				HD	
Part Number		YACBAC1S	YACBA21S	YACBAD1S	YACBAE1S	YACY611C	YACY9A1C
		Hi-702	Hi-704	Hi-707	Hi-708	Hi-162	Hi-191
Optical Format		1/10-inch	1/10-inch	1/10-inch	1/10-inch	1/5.5-inch	1/9-inch
Pixel Size		2.25um x 2.25um	2.25um x 2.25um	2.2um x 2.2um	2.125um x 2.125um	2.0um x 2.0um	1.4um x 1.4um
Active Array Format		640H x 480V	640H x 480V	640H x 480V	640H x 480V	1280H x 800V	1280H x 720V
Frame Rate		30-fps @ full resolution	30-fps @ full resolution	30-fps @ full resolution	30-fps @ full resolution	30-fps @ full resolution 30-fps @ 720P	60-fps @ full resolution 60-fps @ 720P
Type		SOC	SOC	SOC	SOC	RAW	RAW
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	YUV4:2:2 RGB5:6:5 RGB4:4:4	RAW 8bit, 10bit	RAW 8bit, 10bit
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)	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)	1.2V / 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)	2.7V-3.0V (2.8V)
Operating Temp.		-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃
Status		Mass Production	Mass Production	Mass Production	Sampling	Mass Production	Sampling
Packaging		Bare Die (COB) NeoPAC CSP	Bare Die (COB) ShellUT CSP	Bare Die (COB) NeoPAC CSP	Bare Die (COB) TSV CSP	Bare Die (COB) ShellUT CSP NeoPAC CSP	Bare Die (COB) NeoPAC CSP
Interface		Parallel	Parallel	MIPI	Parallel	Parallel	Parallel / MIPI

		1.3M		2M			
Part Number		YACC6A1S	YACC6C1S	YACD511S	YACD5C1S	YACD521S	YACD5D1S
		Hi-161	Hi-163	Hi-253	Hi-255	Hi-256	Hi-257
Optical Format		1/6-inch	1/6-inch	1/5-inch	1/5-inch	1/5-inch	1/5-inch
Pixel Size		1.75um x 1.75um	1.75um x 1.75um	1.75um x 1.75um	1.75um x 1.75um	1.75um x 1.75um	1.75um x 1.75um
Active Array Format		1280H x 1024V	1280H x 960V	1600H x 1200V	1600H x 1200V	1600H x 1200V	1600H x 1200V
Frame Rate		15fps @ full resolution	15fps @ full resolution	15-fps @ full resolution	15-fps @ full resolution	15-fps @ full resolution	15-fps @ full resolution
Type		SOC	SOC	SOC	SOC	SOC	SOC
Output Format		YUV4:2:2 RGB5:6:5 ITU656-like	YUV4:2:2 / RGB5:6:5 / ITU656-like Bayer 8-bit @ Parallel Bayer 10-bit @ MIPI	YUV4:2:2 RGB5:6:5 ITU656-like	YUV4:2:2 RGB5:6:5 ITU656-like	YUV4:2:2 RGB5:6:5 ITU656-like	YUV4:2:2 RGB5:6:5
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	1.7V – 3.0V	1.7V – 3.0V	1.7V – 3.0V
	Digital Core	1.7V-1.9V (1.8V)	1.7V-1.9V (1.8V)	1.7V – 1.9V	1.7V – 1.9V	1.7V – 1.9V	1.7V – 1.9V
	Analog & Pixel	2.7V-3.0V (2.8V)	2.7V-3.0V (2.8V)	2.7V – 3.0V	2.7V – 3.0V	2.7V – 3.0V	2.7V – 3.0V
Operating Temp.		-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃
Status		Mass Production	Mass Production	Mass Production	Mass Production	Mass Production	Sampling
Packaging		Bare die (COB) Recon. Wafer NeoPAC CSP	Bare die (COB) Recon. Wafer NeoPAC CSP	Bare die (COB) ShellUT CSP	Bare die (COB)	ShellUT CSP	Bare die (COB) TSV CSP
Interface		Parallel	Parallel / MIPI	Parallel	Parallel / MIPI	Parallel / MIPI	Parallel

		FHD	3M		5M		8M
Part Number		YACD6A1C	YACE5B1S	YACE5C1S	YACF4B1C	YACF4C1C	YACG4A1C
		Hi-261	Hi-351	Hi-352	Hi-542	Hi-543	Hi-841
Optical Format		1/6-inch	1/5-inch	1/5-inch	1/4-inch	1/4-inch	1/4-inch
Pixel Size		1.34um x 1.34um	1.4um x 1.4um	1.4um x 1.4um	1.4um x 1.4um	1.4um x 1.4um	1.12um x 1.12um
Active Array Format		1920H x 1080V	2048H x 1536V	2048H x 1536V	2592H x 1944V	2592H x 1944V	3264H x 2448V
Frame Rate		60-fps@ full resolution	15-fps @ full resolution	15-fps @ full resolution	15-fps @ full resolution	30-fps @ full resolution	30-fps @ full resolution
Type		RAW	SOC	SOC	RAW	RAW	RAW
Output Format		Raw 8-bit, 10-bit	YUV422, RGB565, RGB666, ITU656-like, Bayer 8bit, 10bit,	YUV422, RGB565, RGB666, ITU656-like, Bayer 8bit, 10bit,	RAW 8bit, 10bit	RAW 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	1.7V – 3.0V
	Digital Core	1.2V / 1.8V	1.1V - 1.3V	1.1V - 1.3V	1.2V / 1.5V / 1.8V	1.8V	1.2V / 1.8V
	Analog & Pixel	2.7V – 3.0V	2.7V – 3.0V	2.7V – 3.0V	2.7V - 3.0V	2.7V - 3.0V	2.7V – 3.0V
Operating Temp.		-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃	-20℃ to 60℃
Status		Sampling	Mass Production	Sampling	Mass Production	Sampling	Sampling
Packaging		Bare die (COB)	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer
Interface		Parallel / MIPI	Parallel / MIPI	Parallel / MIPI	Parallel / MIPI	Parallel / MIPI	Parallel / MIPI