

# Q4'2014 DATABOOK

Rev 0.0





		VGA			HD		
<b>Part Number</b>		YACBA21S	YACBAD1S	YACBAE1S	YACY611C	YACY9A1C	YACY6A1C
		Hi-704	Hi-707	Hi-708	Hi-162	Hi-191	Hi-165
<b>Optical Format</b>		1/10-inch	1/10-inch	1/10-inch	1/5.5-inch	1/9-inch	1/6-inch
<b>Pixel Size</b>		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 BSI	1.75um x 1.75um BSI
<b>Active Array Format</b>		640H x 480V	640H x 480V	640H x 480V	1280H x 800V	1280H x 720V	1280H x 800V
<b>Frame Rate</b>		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	30fps @full resolution
<b>Type</b>		SOC	SOC	SOC	RAW	RAW	RAW
<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 RGB4:4:4	Bayer 10bit	Bayer 10bit	Bayer 10bit
<b>Supply Voltage</b>	<b>Digital I/O</b>	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V
	<b>Digital Core</b>	1.8V	1.8V	1.8V	1.8V	1.2V / 1.8V	1.2V
	<b>Analog &amp; Pixel</b>	2.8V	2.8V	2.8V	2.8V	2.8V	2.8V
<b>Operating Temp.</b>		-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	-20°C to 60°C
<b>Status</b>		Mass Production	Mass Production	Mass Production	Mass Production	Mass Production	Mass Production
<b>Packaging</b>		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	Bare die (COB) NeoPAC CSP
<b>Interface</b>		Parallel	MIPI	Parallel	Parallel	Parallel / MIPI	Parallel / MIPI



		1.3M	2M				
<b>Part Number</b>		YACC6C1S	YACD511S	YACD5C1S	YACD521S	YACD5D1S	YACD5E1S
		Hi-163	Hi-253	Hi-255	Hi-256	Hi-257	Hi-258
<b>Optical Format</b>		1/6-inch	1/5-inch	1/5-inch	1/5-inch	1/5-inch	1/5-inch
<b>Pixel Size</b>		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
<b>Active Array Format</b>		1280H x 960V	1600H x 1200V	1600H x 1200V	1600H x 1200V	1600H x 1200V	1600H x 1200V
<b>Frame Rate</b>		15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution
<b>Type</b>		SOC	SOC	SOC	SOC	SOC	SOC
<b>Output Format</b>		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	YUV4:2:2 RGB5:6:5/4:4:4/5:5:5
<b>Supply Voltage</b>	<b>Digital I/O</b>	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V
	<b>Digital Core</b>	1.8V	1.8V	1.8V	1.8V	1.8V	1.8V
	<b>Analog &amp; Pixel</b>	2.8V	2.8V	2.8V	2.8V	2.8V	2.8V
<b>Operating Temp.</b>		-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	-20°C to 60°C
<b>Status</b>		Mass Production	Mass Production	Mass Production	Mass Production	Mass Production	Mass Production
<b>Packaging</b>		Bare die (COB) Recon. Wafer NeoPAC CSP	Bare die (COB) ShellUT CSP	Bare die (COB)	ShellUT CSP	Bare die (COB) TSV CSP	Bare die (COB) TSV CSP
<b>Interface</b>		Parallel / MIPI	Parallel	Parallel / MIPI	Parallel / MIPI	Parallel	MIPI



		2M	FHD	3M		5M	
<b>Part Number</b>		YACD5F1C	YACD6A1C	YACE5B1S	YACE5C1S	YACF4D1C	YACF4B1C
		Hi-259	Hi-261	Hi-351	Hi-352	Hi-541	Hi-542
<b>Optical Format</b>		1/5-inch	1/6-inch	1/5-inch	1/5-inch	1/4-inch	1/4-inch
<b>Pixel Size</b>		1.75um x 1.75um	1.34um x 1.34um BSI	1.4um x 1.4um	1.4um x 1.4um	1.4um x 1.4um	1.4um x 1.4um
<b>Active Array Format</b>		1632H x 1238V	1920H x 1080V	2048H x 1536V	2048H x 1536V	2592H x 1944V	2592H x 1944V
<b>Frame Rate</b>		30-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution	15-fps @full resolution
<b>Type</b>		RAW	RAW	SOC	SOC	SOC	RAW
<b>Output Format</b>		Bayer 10-bit	Bayer 10-bit	YUV4:2:2,RGB5:6:5 ITU656-like, Bayer 10bit,	YUV4:2:2,RGB5:6:5 ITU656-like, Bayer 10bit,	YUV4:2:2 RGB5:6:5	Bayer 10bit
<b>Supply Voltage</b>	<b>Digital I/O</b>	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V
	<b>Digital Core</b>	1.8V	1.2V / 1.8V	1.2V	1.2V	1.2V / 1.8V	1.2V / 1.5V / 1.8V
	<b>Analog &amp; Pixel</b>	2.8V	2.8V	2.8V	2.8V	2.8V	2.8V
<b>Operating Temp.</b>		-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	-20°C to 60°C
<b>Status</b>		Sampling	Mass Production	Mass Production	Mass Production	Mass Production	Mass Production
<b>Packaging</b>		Bare die (COB)	Bare die (COB) Neopac CSP (TSV CSP)	Bare die (COB) Recon. Wafer	Bare die (COB) Recon. Wafer	Recon. Wafer	Recon. Wafer
<b>Interface</b>		MIPI	Parallel / MIPI	Parallel / MIPI	Parallel / MIPI	Parallel / MIPI	Parallel / MIPI



		5M				8M	13M
<b>Part Number</b>		YACF4C1C	YACF4E1C	YACF4F1C	YACF5A1C	YACG4A1C	YACJ3A0C
		Hi-543	Hi-544	Hi-545	Hi-551	Hi-841	Hi-1331
<b>Optical Format</b>		1/4-inch	1/4-inch	1/4-inch	1/5-inch	1/4-inch	1/3-inch
<b>Pixel Size</b>		1.4um x 1.4um	1.4um x 1.4um	1.4um x 1.4um BSI	1.12um x 1.12um BSI	1.12um x 1.12um BSI	1.12um x 1.12um BSI-2
<b>Active Array Format</b>		2592H x 1944V	2592H x 1944V	2592H x 1944V	2592H x 1944V	3264H x 2448V	4208H x 3120V
<b>Frame Rate</b>		30-fps @full resolution	30-fps @full resolution	30-fps @full resolution	30-fps @full resolution	30-fps @full resolution	30-fps @full resolution
<b>Type</b>		RAW	RAW	RAW	RAW	RAW	RAW
<b>Output Format</b>		Bayer 10bit	Bayer 10bit	Bayer 10bit	Bayer 10bit	Bayer 10bit	Bayer 10bit
<b>Supply Voltage</b>	<b>Digital I/O</b>	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V	1.8V / 2.8V
	<b>Digital Core</b>	1.8V	1.2V / 1.8V	1.2V / 1.8V	1.2V / 1.8V	1.2V / 1.8V	1.2V
	<b>Analog &amp; Pixel</b>	2.8V	2.8V	2.8V	2.8V	2.8V	2.8V
<b>Operating Temp.</b>		-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	-20°C to 60°C
<b>Status</b>		Mass Production	Mass Production	Mass Production	Mass Production	Mass Production	Sampling
<b>Packaging</b>		Recon. Wafer	Recon. Wafer (TSV CSP)	Recon. Wafer (TSV CSP)	Recon. Wafer (TSV CSP)	Recon. Wafer	Recon. Wafer
<b>Interface</b>		Parallel / MIPI	MIPI	MIPI	MIPI	Parallel / MIPI	MIPI



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