

About us

Gpixel delivers off-the-shelf and semi – or fully-customized CMOS image sensors that meet the demands of scientific, industrial, professional and medical imaging markets. At Gpixel our seasoned, multidisciplinary team of experts are passionate about pushing the boundaries of image-sensing technologies. As a proven designer and supplier of advanced CMOS image sensors, we develop solutions that meet the exacting demands of our target markets with the added benefits of volume production.

Founded in 2012 by experienced CMOS image sensor designers and semiconductor physicists, Gpixel works in close cooperation with our customers and business partners to produce advanced CMOS image sensors for use all over the world. From our offices in Changchun (headquarters), Hangzhou and Dalian, China, Antwerp, Belgium (European design center) and Tokyo, Japan (Japanese design center) we are committed to delivering innovative and specialized high-end CMOS image sensor solutions to our global customer base.

Our advanced CMOS image sensors use a wide range of innovative and state-of-the-art features and functionality. From high resolutions and fast frame rates to very high gain and extremely low noise, you can choose the exact features your camera needs. You also have the choice of optical format, pixel size and global or rolling shutter options. Gpixel's standard products include the GMAX and GSPRINT global shutter, fast frame rate sensors, the GSENSE high-end scientific CMOS image sensor series, the GLUX series of high sensitivity sensors for surveillance, the GL series of line scan imagers, the GLT series of TDI imagers, GTOF series of iTOF imagers, and the GCINE series of sensors for professional video and photography. Gpixel provides a broad portfolio of products leveraging the latest technologies to meet the ever-growing demands of the professional imaging market. Gpixel is committed to provide a broad portfolio of products utilizing the latest technologies to meet the ever-growing demands of the professional imaging market.

Visit us at: www.gpixel.com

Please address all product enquires to info@gpixel.com



Image Sensors Product Guide

Gpixel

		RESOLUTION (PIXELS)	RESOLUTION (H x V)	PIXEL SIZE (µm ²)	OPTICAL FORMAT	GLOBAL ROLLING TDI	8-BIT	10-BIT	11-BIT	12-BIT	14-BIT	16-BIT	MPI	(SUB-)LVDS	LANES	MAX. FPS	MAX. DATA RATE (Gbps)	MIN. DARK NOISE (e ⁻)	FWC (ke ⁻)	MAX. DYNAMIC RANGE (dB)	SNR MAX (dB)	QE@500 nm	LGA	PGA	UPGA	CLOC	LCC	COB	PINS	PACKAGE SIZE (mm)	CHROMA	POWER (W)	
GMAX SERIES																																	
GMAX2505	NORMAL SPEED	5.0 MP	2600 x 2160	2.5 x 2.5	1/2"	•		•					•	10	121	8.2	1.8	6.7	65.0	38.0	65%	•							226	23.0 x 17.5		0.6	
GMAX2505	HIGH SPEED	5.0 MP	2600 x 2160	2.5 x 2.5	1/2"	•	•						•	20	290	19.2	3.9	6.7	62.0	38.0	65%	•							226	22.0 x 17.5		0.9	
GMAX4002	NORMAL SPEED	2.4 MP	2048 X 1200	4.0 X 4.0	1/1.7"	•	•				•	•	•	8/4	229 @ LVDS	5.6	2.6	10.8	64.4	40.4	37%			•				76	16.6 x 12.9		0.5		
GMAX4002	HIGH SPEED	2.4 MP	2048 X 1200	4.0 X 4.0	1/1.7"	•	•						•	8	344	8.5	2.3	12.8	64.6	40.4	73%			•				74	16.6 x 12.9		0.5		
GMAX4002W	-	1.6 MP	1312 X 1200	4.0 X 4.0	1/1.7"	•	•						•	8/4	229 @ LVDS	3.1	2.3	12.0	64.4	40.4	37%			•				78	16.6 x 12.9		0.5		
GMAX2509	NORMAL SPEED	9.0 MP	4200 x 2160	2.5 x 2.5	2/3"	•							•	16	121	13.2	1.8	6.7	65.0	38.0	65%	•							226	22.0 x 17.5		0.9	
GMAX2509	HIGH SPEED	9.0 MP	4200 x 2160	2.5 x 2.5	2/3"	•	•						•	32	290	26.3	3.9	6.7	62.0	38.0	65%	•							226	22.0 x 17.5		1.2	
GMAX3405	-	5 MP	2448 x 2048	3.4 x 3.4	2/3"	•	•						•	12	261 @ LVDS	1.2		10.0	68.8	40.0	75%	•							176	17.6 x 15.8		1.1	
GMAX3412	-	12 MP	4096 x3072	3.4 x 3.4	1"	•	•						•	16	141 @ LVDS	1.2		10.0	68.8	40.0	75%	•							176	22.9 x 19.4		1.6	
GMAX2518	NORMAL SPEED	18 MP	4508 x 4096	2.5 x 2.5	1"	•							•	16	64	14.2	1.7	8.0	67.0	39.0	66%	•							226	20.8 x 19.5		1.2	
GMAX2518	HIGH SPEED	18 MP	4508 x 4096	2.5 x 2.5	1"	•	•						•	32	139	25.7	4.7	8.0	62.0	39.0	66%	•							226	20.8 x 19.5		1.2	
GMAX3809	-	9.0 MP	4096 x 2160	3.8 x 3.8	1.1"	•							•	8	50	6.9	3.3	10.5	67.0	40.4	61%	•							163	27.1 x 17.9		1.0	
GMAX0505	NORMAL SPEED	26.2 MP	5120 x 5120	2.5 x 2.5	1.1"	•							•	16	42	13.2	1.6	6.5	65.0	38	66%	•							226	22.3 x 23.4		1.1	
GMAX0505	HIGH SPEED	26.2 MP	5120 x 5120	2.5 x 2.5	1.1"	•	•						•	48	150	39.3	3.4	6.5	60.0	38	66%	•							226	22.3 x 23.4		1.5	
GMAX3413	-	12.7MP	5900 x 2160	3.4 x 3.4	4/3"	•							•	8	32	4.9	2.3	8.6	71.4	39.3	52.5	•							163	32.7 x 17.9		1.2	
GMAX3265	NORMAL SPEED	65.4 MP	9344 x 7000	3.2 x 3.2	2.3"	•							•	28	31	24.3	1.9	10.9	66.0	40.3	65%			•					239	41.8 x 35.8		2.1	
GMAX3265	HIGH SPEED	65.4 MP	9344 x 7000	3.2 x 3.2	2.3"	•	•						•	56	71	46.4	7.5	10.6	62.0	40.0	65%			•					239	41.8 x 35.8		2.3	
GMAX4651	-	50.8 MP	8424 x 6032	4.6 x 4.6	2.7"	•							•	24	30	18.3	7.6	18.0	65.5	42.5	67%			•					238	58.6 x 42.0		2.8	
GMAX32103	-	103.7 MP	11276 x 9200	3.2 x 3.2	2.9"	•							•	52	24	29.9	4.3	9.0	66.4	39.5	67%			•					209	49.5 x 42.3		2.5	
GMAX32152	-	152.3 MP	16556 x 9200	3.2 x 3.2	3.7"	•							•	38	16	29.2	4	9.3	67.3	39.6	67%			•					183	68.2 x 52.0		2.8	
GSPRINT SERIES																																	
GSPRINT4502	-	2.0 MP	2048 x 1216	4.5 x 4.5	2/3"	•	•	•					•	64/44/22	3462 @ 8-bit	69.0	16	30	53.0	44.8	64%									255	28.0 x 29.4		2.5
GSPRINT4510	NORMAL SPEED	10.0 MP	4608 x 2176	4.5 x 4.5	4/3"	•	•						•	72	999	154.0	16.7	28.6	51.8	44.5	63%									454	42.0 x 34.0		5.0
GSPRINT4510	HIGH SPEED	10.0 MP	4609 x 2176	4.5 x 4.5	4/3"	•	•						•	144	1920	154.0	16.7	28.6	51.8	44.5	63%									454	42.0 x 34.0		5.0
GSPRINT4510	FULL SPEED	10.0 MP	4608 x 2176	4.5 x 4.5	4/3"	•	•	•					•	144/92/52	1920 @ 8-bit	100.3	7.4	31	61.9	44.9	63%									454	42.0 x 34.0		5.0
GSPRINT4521	NORMAL SPEED	21.0 MP	5120 x 4096	4.5 x 4.5	1.84"	•	•	•					•	96/56	500 @ 10-bit	167.8	3.5	32	53.3	44.7	63%									454	42.0 x 39.7		6.0
GSPRINT4521	HIGH SPEED	21.0 MP	5120 x 4096	4.5 x 4.5	1.84"	•	•	•					•	160/96/56	1000 @ 8-bit	104.9	7.3	30	61.8	44.7	63%									454	42.0 x 39.7		6.0
GL SERIES																																	
GL3504	-	4K 2K	4096 x 2 2048 x 4	3.5 x 3.5 7.0 x 7.0	14.3 mm	•		•					•	6	84.4k 172.7k	4.1 4.2	4.9	11 9.3	67.0 65.5	40.4 39.6	65%								58	22.3 x 10.6		1.0	
GL0402	-	4K	4096 x 1 4096 x 2	7.0 x 7.0	28.7 mm	•		•					•	12	200k 100k	9.8	5.2 6.8	21 20	66.5 62.6	43.8 44	68%								76	40.0 x 11.0		2.25	
GL1402	-	2K	2048 x 1 2048 x 3	14.0 x 14.0	28.7 mm	•		•					•	4	81k 27k	2.0	9.1	28.7	69.9	44.5	61%								54	38 x 7.4		0.42	
GL0816	-	8K	8322 x 2 8322 x 4	5.0 x 5.0	41.6 mm	•	•	•					•	66	200k 100k	36.6 33.3	13 17	17 15	62.0 58.9	42 41	69% 69%								258	55.8 x 18.1		4.0	
GLT5009BSI	-	9K	9072 x 256 +32	5.0 x 5.0	45.3 mm	•	•	•					•	86	608k 300k	74.3 32.7	11.4 7.2	15.8 19.2	63.6 68.7	42.0 42.8	81%								269	61.5 x 20.0		5.8	
GL7008	-	8K	8192 x 1 8192 x 2 8192 x 3 8192 x 4	7.0 x 7.0	57.3 mm	•		•					•	25	200k 100k 66.7k 50k	24	6.8	10	63.3	40	70%								168	71.8 x 32.0		4.4	
GL3516	-	16K	16384 x 1 16384 x 2	3.5 x 3.5	57.3 mm	•	•						•	25	120k 60k	19.7	8.2	5.6	56.6	37.5	57%								168	71.8 x 32.0		1.9	
GSENSE SERIES																																	
GSENSE2011	-	2.0 MP	2048 x 1152	6.5 x 6.5	1"	•	•	•					•	8	653	15.4	15	15	60	41.8	68%									153	26.1 x 29.5		0.8
GSENSE2020	-	4.0 MP	2048 x 2048	6.5 x 6.5	1.2"	•		•					•	8	83 (HDR) 47	4.8	2.1	45	86.6	46	68%									153	26.1 x 29.5		0.8
GSENSE2020BSI	-	4.0 MP	2048 x 2048	6.5 x 6.5	1.2"	•		•					•	8	43 74	2.2 3.4	1.6	55	90.5	47	90%									153	26.1 x 29.5		1.2
GSENSE400	-	4.0 MP	2048 x 2048	11.0 x 11.0	2"	•		•					•	8	24(HDR)	2.4	1.5	91	95.6	49	53%									115	36.5 x 36.5		0.6
GSENSE400BSI	-	4.0 MP	2048 x 2048	11.0 x 11.0	2"	•		•					•	8	24 (HDR)	2.4	1.6	91	94	50	92%									115	36.5 x 36.5		0.6
GSENSE4040	-	16.0 MP	4096 x 4096	9.0 x 9.0	3.3"	•		•					•	18	24	4.8	3.7	74.2	86.0	48.5	71%								140	51.5 x 53.0		1.4	
GSENSE4040BSI	-	16.0 MP	4096 x 4096	9.0 x 9.0	3.3"	•		•					•	18	24	4.8	2.3	39.2	85	45.9	88%								140	51.5 x 53.0		1.4	
GSENSE6060	-	37.0 MP	6144 x 6144	10.0 x 10.0	5.4"	•		•					•	50	19 (HDR)	7.4	4.6	128	89	51.1	70%								250	74.0 x 99.0		5.4	
GSENSE6060BSI	-	37.0 MP	6144 x 6144	10.0 x 10.0	5.4"	•		•					•	52	11 (HDR)	4.2	2.3	95	90	49.8	90%								250	74.0 x 99.0		4.6	
GSENSE1081BSI	-	81.2 MP	8900 x 9120	10.0 x 10.0	7.96"	•																											