

( Sensor: 1/5 inch, 1.12um )											MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/Sample/MP	Lens	Barrel	Lens	Barrel
5M 1/5inch	L5AH05*	3.20mm	2.2	72.0 degree	4P	3.88mm	30.16	Samsung:5EA/5E2 OV:5670 SONY: IMX241	ALPS-001A (M=5.0, P=0.25)	MP OK	○	○	○	○
	L5BH05*	3.20mm	2.2	72.0 degree	4P	3.88mm	30.16	Samsung:5EA/5E2 OV:5670 SONY: IMX241	(M=5.0, P=0.20)	MP OK	○	○	○	○
5M ( Sensor: 1/4 inch, 1.4um )											MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/Sample/MP	Lens	Barrel	Lens	Barrel
5M 1/4inch	T5GS*	4.20mm	2.8	65.1 degree	4P	4.84mm	25.88	OV:5642/47/97 Aptina:5146/0543 Samsung:4E1 Hynix:HI542	TDK-TVF-608 (M=6.0, P=0.35)	MP OK	○	○	-	-
	T5AN05*	3.90mm	2.4	71.8 degree	4P	4.82mm	30.05	Toshiba: T8EVS/ T8ETS	(M=5.0, P=0.25)	MP OK	○	○	-	-
	A5HX05*	3.89mm	2.4	72.9 degree	4P	4.84mm	27.60	OV: OV5642/5647/5690 Aptina: 5146/0543 Samsung: 4E1 Hynix:HI544	Mitsumi:KAF-V85S60-51 (M=6.0, P=0.35) Guixing:ML00177-Y0 (M=6.0, P=0.35)	MP OK	○	○	-	-
8M ( Sensor: 1/4inch, 1.1um or 1.12um )											MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/Sample/MP	Lens	Barrel	Lens	Barrel
8M 1/4inch	R5BZ08* High illumination	3.80mm	2.0	75.7 degree	5P	4.77mm	29.07	SONY: IMX111/134/219 OV: OV8855/8856/8858 Aptina: AR0841 Samsung: 4H5 Hynix: HI841	CX09 (Torque management holder of the KT start of work) (M=6.0, P=0.25)	MP OK	○	○	○	○
	R5GZ08* High illumination	3.80mm	2.0	75.7 degree	5P	4.77mm	29.07	SONY: IMX111/134/219 OV: OV8855/8856/8858 Aptina: AR0841 Samsung: 4H5 Hynix: HI841	BL-22 (M=6.0, P=0.25)	MP OK	○	○	○	○
	R5AV08* Low profile	3.38mm	2.4	76.2 degree	5P	4.90mm	32.87	SONY:IMX111/134/219 OV: OV8855/8856/8858 Aptina:AR0841 Samsung: 4H5 Toshiba: T4K35/T4KA3 Hynix: HI841	TDK-TVF-617 (M=6.0, P=0.25)	MP OK	○	○	○	○
	S5AE08* Low cost High illumination	3.81mm	2.0	75.7 degree	4P	4.82mm	32.54	SONY: IMX111/134/219 OV: OV8855/8856/8858 Samsung: 4H5 Toshiba: T4K35/T4KA3 Hynix: HI841	<del>FDK-TVF-638</del> CX09 (Torque management holder of the KT start of work) (M=6.0, P=0.25)	MP OK	○	○	○	○
	S5BE08* Low cost High illumination	3.81mm	2.2	76.0 degree	4P	4.82mm	32.54	SONY: IMX111/134/219 OV: OV8855/8856/8858 Samsung: 4H5 Toshiba: T4K35/T4KA3	<del>FDK-TVF-638</del> BL17 (M=6.0, P=0.25)	MP OK	○	○	○	○
	A5HX08* Low cost	3.89mm	2.4	72.2 degree	4P	4.84mm	27.59	SONY:IMX111/134/219 OV: OV8855/8856/8858 Aptina: AR0841 Samsung: 4H5 Hynix: HI841	Mitsumi:V85S60-51 (M=6.0, P=0.35) Guixing:ML00177-Y0 (M=6.0, P=0.35)	MP OK	○	○	-	-
	G4402A*8 Low cost	3.50mm	2.2	77.6 degree	4P	4.845mm	32.51	Sony: IMX 134 Toshiba: T4K35/T4KA3 OV: OV8855/8856/8858	CX09 (Torque management holder of the KT start of work) (M=6.0, P=0.25)	MP OK	○	○	○	○
	G4403A*8 Low cost Wide angle	3.70mm	2.2	80.1 degree	4P	4.87mm	32.24	OV: OV8855/8856/8858 Hynix: HI841	(Torque management holder of the KT start of work) (M=6.0, P=0.25)	MP OK	○	○	○	○
	G4406A*8 Low profile	3.38mm	2.4	76.9 degree	4P	4.80mm	32.9	OV: OV8855/8856/8858 SONY:IMX134/219 Samsung: 4H5 Toshiba: T4K35/T4KA3 Hynix: HI841	CX09 (Torque management holder of the KT start of work) (M=6.0, P=0.25)	Design	-	-	-	-

8M ( Sensor: 1/3.2inch, 1.4um )											MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/Sample/MP	Lens	Barrel	Lens	Barrel
8M 1/3inch	U5AM08* Low profile	4.45mm	2.2	73.9 degree	5P	6.17mm	32.38	SONY IMX175/179 OV: OV8865/8868 Samsung: 3H2/3H7 Aptina: AR0833	Mitsumi-V70S84-L1 (M=6.5, P=0.25)	MP OK	○	○	-	-
	U5BM08* Low profile	4.45mm	2.2	73.9 degree	5P	6.17mm	32.38	SONY IMX175/179 OV: OV8865/8868 Samsung: 3H2/3H7 Aptina: AR0833	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	○	○	-	-
	W5CX08* Wide angle Low profile	4.20mm	2.4	80.0 degree	5P	6.01mm	32.85	OV: OV8865/8868 SONY: IMX 105/175/179 Toshiba: T4K37, T4K82	Xiamen Huaye PN8N15A-701 (M=6.5, P=0.25)	MP OK	○	○	○	○
	W5DX08* Wide angle Low profile	4.20mm	2.2	80.1 degree	5P	6.01mm	33.00	OV: OV8865/8868 SONY: IMX 105/175/179 Toshiba: T4K37, T4K82	Hysonic A65S-8536-28D1 (M=6.5, P=0.25)	MP OK	○	○	○	○
	W5GX08* Wide angle Low profile	4.20mm	2.2	80.1 degree	5P	6.01mm	33.00	OV: OV8865/8868 SONY: IMX 105/175/179 Toshiba: T4K37, T4K82	ALPS-501A/502A (M=6.5, P=0.25)	Sample OK ( Changed to W5DX side )	○	-	○	○
	W5JX08* Wide angle Low profile	4.20mm	2.2	80.1 degree	5P	6.01mm	33.00	OV: OV8865/8868 SONY: IMX 105/175/179 Toshiba: T4K37, T4K82	BL-32E (M=6.5, P=0.25)	MP OK	○	○	○	○
	G5EX08* High illumination	4.60mm	2.0	75.1 degree	5P	6.10mm	31.13	SONY IMX105/175/179 OV: OV8865/8868 Samsung: 3H7 Aptina: AR0833	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	○	○	-	-
	G5KX08* High illumination	4.60mm	2.0	75.1 degree	5P	6.10mm	31.13	SONY IMX105/175/179 OV: OV8865/8868 Samsung: 3H7 Aptina: AR0833	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	○	○	-	-
	W5AR08* High resolution	4.81mm	2.4	71.6 degree	5P	6.14mm	28.97	SONY IMX175/179 OV: OV8830/8865/8868 Aptina: AR0833 Samsung: 3H7	Mitsumi-S1.M1(Model of LD2) (M=6.5, P=0.25)	MP OK	○	○	-	-
	G5AG08* High resolution	5.00mm	2.4	66.0 degree	5P	6.05mm	28.30	SONY IMX175/179 OV: OV8830/8865/8868 Aptina: AR0833 Samsung: 3H7	Mitsumi	Sample OK	○	-	-	-
	Q5BG08* Low cost	4.64mm	2.8	69.1 degree	4P	6.10mm	29.54	SONY IMX175/179 OV: OV8830/8865/8868 Aptina: AR0833 Samsung: 3H7	Contact K853360	MP OK	○	○	-	-
	W5CY08* High illumination	4.47mm	2.0	74.6 degree	5P	6.30mm	32.21	SONY: IMX105/175/179 Samsung: 3H2/3H7 OV: OV8865/8868 Aptina:AR0833	CX09 (Torque management holder of the KT start of work) (M=6.5, P=0.25)	MP OK	○	○	○	○
	W5EY08* OIS High illumination	4.47mm	2.0	74.6 degree	5P	6.30mm	32.21	SONY: IMX105/175/179 Samsung: 3H2/3H7 OV: OV8865/8868 Aptina:AR0833	Mitsumi-OIS(ASA-LV195-1)	MP OK	○	○	○	○
	W5FY08*	4.47mm	2.2	74.6 degree	5P	6.30mm	32.04	SONY: IMX105/175/179 Samsung: 3H2/3H7 OV: OV8865/8868 Aptina:AR0833	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	○	○	○	-
	W5JY08*	4.47mm	2.0	74.6 degree	5P	6.30mm	32.21	SONY: IMX105/175/179 Samsung: 3H2/3H7 OV: OV8865/8868 Aptina:AR0833	Mitsumi-Alternate-A72S85 (M=6.5, P=0.25) Mitsumi-V78S85-L3(Model of LD9) (M=6.5, P=0.25)	MP OK (Changed to W5CY side)	○	-	○	○
	W5NY08* High illumination	4.47mm	2.0	74.6 degree	5P	6.30mm	32.21	SONY: IMX105/175/179 Samsung: 3H2/3H7 OV: OV8865/8868 Aptina:AR0833	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	○	○	○	-
	W5UY08* OIS High illumination	4.47mm	2.0	74.6 degree	5P	6.30mm	32.21	SONY: IMX105/175/179 Samsung: 3H2/3H7 OV: OV8865/8868 Aptina:AR0833	Mitsumi-OIS(ASA-LV195) TDK-OIS(TVA-652) (Barrel φ=6.18)	MP OK	○	○	○	○
	F4503A*8 High illumination	4.50mm	2.0	73.5 degree	5P	6.05mm	31.99	SONY: IMX179	Mitsumi-Close Loop VCM (Barrelφ=6.10)	MP OK	○	○	○	○
	F4507A*8 Low profile Focus@40cm	4.00mm @40cm (3.97mm @Inf)	2.4	80.1 degree	5P	6.01mm	32.14	SONY: IMX179 OV : OV8865/8868	(M=6.5, P=0.25)	MP OK	○	○	○	○
	F4512A*8 Low profile	3.94mm	2.2	-	5P	6.17mm	35.11	OV : OV8865/8868	Mitsumi-V78S85-L3 (Model of LD4)-(Model of LD10) (M=6.5, P=0.25)	MP OK	○	○	○	○
F4512B*8 Low profile	3.94mm	2.2	-	5P	6.17mm	35.11	OV : OV8865/8868	ALPS-901A (M=6.5, P=0.25)	Sample OK MP end of November,2015 shipment	○	Tooling	-	○	
12.3M ( Sensor: 1/2.3 inch, 1.55um )											MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/Sample/MP	Lens	Barrel	Lens	Barrel
12M 1/2.3inch	B4609A*C OIS Low profile	5.25mm	2.2	79.1 degree	6P	8.200mm	33.40	SONY: IMX377/ IMX378	Mitsumi-ASA-FV1C8 (Barrelφ=8.00)	Sample OK MP 2016Q1	Tooling	Tooling	○	○

13M ( Sensor: 1/3 inch, 1.1um or 1.12um )											MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/Sample/MP	Lens	Barrel	Lens	Barrel
	U5AM13* Low profile	4.45mm	2.2	73.9 degree	5P	6.17mm	32.44	SONY IMX135/214/258/278 OV: OV13850 Aptina: AR1330 Panasonic: MN34130 Samsung: 3L2/3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 Samsun: S5K3L8/3M2	Mitsumi-V70S84-L1 (M=6.5, P=0.25)	MP OK	o	o	-	-
	U5BM13* Low profile	4.45mm	2.2	73.9 degree	5P	6.17mm	32.44	SONY IMX135/214/258/278 OV: OV13850 Aptina: AR1330 Panasonic: MN34130 Samsung: 3L2/3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 Samsun: S5K3L8/3M2	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	-	-
	W5CX13* Wide angle Low profile	4.20mm	2.4	81.5 degree	5P	6.17mm	32.82	OV:13850 SONY: IMX 135/214/258/278 Toshiba: T4K37/ T4K82/T4KB3 Samsung: S5K3L8/3M2	Xiamen Huaye PN8N15A-701 (M=6.5, P=0.25)	MP OK	o	o	o	o
	W5DX13* Wide angle Low profile	4.20mm	2.2	81.3 degree	5P	6.17mm	32.98	OV:13850 SONY: IMX 135/214/258/278 Toshiba: T4K37/ T4K82/T4KB3 Samsung: S5K3L8/3M2	Hysonic A65S-8536-28D1 (M=6.5, P=0.25)	MP OK	o	o	o	o
	W5GX13* Wide angle Low profile	4.20mm	2.2	81.3 degree	5P	6.01mm	32.98	OV:13850 SONY: IMX 135/214/258/278 Toshiba: T4K37/ T4K82/T4KB3 Samsung: S5K3L8/3M2	ALPS-501A/502A (M=6.5, P=0.25)	Sample OK ( Changed to W5DX side )	o	-	o	o
	W5JX13* Wide angle Low profile	4.20mm	2.2	81.3 degree	5P	6.01mm	32.98	OV:13850 SONY: IMX 135/214/258/278 Toshiba: T4K37/ T4K82/T4KB3 Samsung: S5K3L8/3M2	BL-32E (M=6.5, P=0.25)	MP OK	o	o	o	o
	W5CY13* High illumination	4.47mm	2.0	76.3 degree	5P	6.30mm	32.20	SONY: IMX135/214/258/278 OV: OV13850 Samsung: 3L2/3L8/3M2 Panasonic: MN34130 Toshiba: T4K37/ T4K82/T4KB3 Aptina: AD4225	CX09 (Torque management holder of the KT start of work) (M=6.5, P=0.25)	MP OK	o	o	o	o
	W5EY13* OIS High illumination	4.47mm	2.0	76.3 degree	5P	6.30mm	32.20	SONY: IMX135/214/258/278 OV: OV13850 Samsung: 3L2/3L8/3M2 Panasonic: MN34130 Toshiba: T4K37/ T4K82/T4KB3 Aptina: AD4225	Mitsumi-OIS(ASA-LV195-1)	MP OK	o	o	o	o
	W5FY13*	4.47mm	2.2	76.3 degree	5P	6.30mm	32.03	SONY: IMX135/214/258/278 OV: OV13850 Samsung: 3L2/3L8/3M2 Panasonic: MN34130 Toshiba: T4K37/ T4K82/T4KB3 Aptina: AD4225	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	o	-
	W5JY13*	4.47mm	2.0	76.3 degree	5P	6.30mm	32.20	SONY: IMX135/214/258/278 OV: OV13850 Samsung: 3L2/3L8/3M2 Panasonic: MN34130 Toshiba: T4K37/ T4K82/T4KB3 Aptina: AD4225	Mitsumi-Alternate-A72S85 (M=6.5, P=0.25) Mitsumi-V78S85-L3(Model of LD9) (M=6.5, P=0.25)	MP OK (Changed to W5CY side)	o	-	o	o
	W5NY13* High illumination	4.47mm	2.0	76.3 degree	5P	6.30mm	32.20	SONY: IMX135/214/258/278 OV: OV13850 Samsung: 3L2/3L8/3M2 Panasonic: MN34130 Toshiba: T4K37/ T4K82/T4KB3 Aptina: AD4225	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	o	-
13M 1/3inch	W5UY13* OIS High illumination	4.47mm	2.0	76.3 degree	5P	6.30mm	32.20	SONY: IMX135/214/258/278 OV: OV13850 Samsung: 3L2/3L8/3M2 Panasonic: MN34130 Toshiba: T4K37/ T4K82/T4KB3 Aptina: AD4225	Mitsumi-OIS(ASA-LV195) TDK-OIS(TVA-652) (Barrel φ=6.18)	MP OK	o	o	o	o
	G5EX13* High illumination	4.60mm	2.0	76.4 degree	5P	6.10mm	31.19	SONY:IMX 091/135/214/258/278 OV: OV13850 Aptina: AR1330 Toshiba: T4K37/ T4K82/T4KB3 Samsung: S5K3L8/3M2	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	-	-
	G5KX13* High illumination	4.60mm	2.0	76.4 degree	5P	6.10mm	31.19	SONY:IMX 091/135/214/258/278 OV: OV13850 Aptina: AR1330 Toshiba: T4K37/ T4K82/T4KB3 Samsung: S5K3L8/3M2	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	-	-
	G5AG13*	5.00mm	2.4	67.4 degree	5P	6.05mm	28.29	SONY: IMX091 OV: OV13850	Mitsumi	Sample OK	o	o	-	-
	W5BR13*	4.81mm	2.4	70.2 degree	5P	6.14mm	28.90	SONY: IMX091 OV: OV13850 Panasonic: MN34130	Mitsumi-S1.M1(Model of LD2) (M=6.5, P=0.25)	MP OK	o	o	-	-
	F4503A*D High illumination	4.50mm	2.0	74.7 degree	5P	6.05mm	31.97	SONY: IMX135/214/258/278 Samsung: S5K3L8/3M2/3L2 OV: 13850 Toshiba: T4K37/ T4K82/T4KB3	Mitsumi-Close Loop VCM (Barrelφ=6.10)	MP OK	o	o	o	o
	F4512A*D Low profile	3.94mm	2.2	82.2 degree	5P	6.17mm	35.09	Samsung: S5K3L8/3M2 OV: 13850_R2D SONY: IMX214/258/278	Mitsumi-V78S85-L3 (Model of LD4)-(Model of LD10) (M=6.5, P=0.25)	MP OK	o	o	o	o
	F4512B*D Low profile	3.94mm	2.2	82.2 degree	5P	6.17mm	35.09	Samsung: S5K3L8/3M2 OV: 13850_R2D SONY: IMX214/258/278	ALPS-901A (M=6.5, P=0.25)	Sample OK	-	-	-	o
	F4403A*D Low cost	4.30mm	2.2	77.0 degree	4P	6.17mm	32.77	OV: 13850 Samsung: S5K3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 SONY: IMX214/258/278	Mitsumi-V78S85-L3(Model of LD4) (M=6.5, P=0.25)	Sample OK (Need of tooling barrel mold)	o	-	o	o
	F4403C*D Low cost	4.30mm	2.2	77.0 degree	4P	6.17mm	32.77	OV: 13850 Samsung: S5K3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 SONY: IMX214/258/278	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	o	o

	F5512A*D High illumination Low profile	4.20mm	2.0	78.0 degree	5P	6.17mm	33.80	OV: 13850_R2D Samsung: S5K3L8/3M2 SONY: IMX214/258/278	Mitsumi-Close Loop VCM TDK-Close Loop VCM (φ=6.18)	Need of tooling barrel mold	-	-	-	-
	F5512B*D High illumination Low profile	4.20mm	2.0	78.0 degree	5P	6.17mm	33.80	OV: 13850_R2D Samsung: S5K3L8/3M2 SONY: IMX214/258/278	GX00 (Torque management holder of the KT start of work)→ ALPS-901A	Sample middle of November,2015 shipment	-	-	Tooling	Tooling
	F5601A*D High illumination	4.50mm	2.0	76.0 degree	6P	6.17mm	33.40	OV: 13850/13850_R2D Samsung: S5K3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 SONY: IMX135/214/258/278	Mitsumi-Close Loop VCM TDK-Close Loop VCM (φ=6.18)	Need of tooling barrel mold	-	-	Plan	Plan
	F5601C*D High illumination	4.50mm	2.0	76.0 degree	6P	6.17mm	33.40	OV: 13850/13850_R2D Samsung: S5K3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 SONY: IMX135/214/258/278	Mitsumi-KAFA72S85 (M=6.5, P=0.25)	Sample OK	-	-	o	o
	F5601D*D High illumination	4.50mm	2.0	76.0 degree	6P	6.17mm	33.40	OV: 13850/13850_R2D Samsung: S5K3L8/3M2 Toshiba: T4K37/ T4K82/T4KB3 SONY: IMX135/214/258/278	XPT-85B-BC36 (M=6.5, P=0.25)	Sample middle of December,2015 shipment	-	-	-	Tooling
<b>13M ( Sensor: 1/2.6 inch, 1.3um )</b>											<b>MP mold</b>		<b>Test mold</b>	
<b>Type</b>	<b>Model</b>	<b>TTL</b>	<b>Fno</b>	<b>FOV</b>	<b>Comp onent</b>	<b>Max Image Circle</b>	<b>Lens CRA</b>	<b>Matching Sensor</b>	<b>VCM</b>	<b>Design/ Sample/ MP</b>	<b>Lens</b>	<b>Barrel</b>	<b>Lens</b>	<b>Barrel</b>
13M 1/2.6inch	C4602A*D OIS High illumination	5.30mm	2.0	77.0 degree	6P	7.30mm	33.80	OV 13860/13863 Samsung: 2M8	ALPS-701A(VCM) TDK-710(OIS) (Barrel φ=7.05)	MP OK	o	o	o	o
<b>16M ( Sensor: 1/3.1 inch, 1.00um or 1.008um )</b>											<b>MP mold</b>		<b>Test mold</b>	
<b>Type</b>	<b>Model</b>	<b>TTL</b>	<b>Fno</b>	<b>FOV</b>	<b>Comp onent</b>	<b>Max Image Circle</b>	<b>Lens CRA</b>	<b>Matching Sensor</b>	<b>VCM</b>	<b>Design/ Sample/ MP</b>	<b>Lens</b>	<b>Barrel</b>	<b>Lens</b>	<b>Barrel</b>
16M 1/3inch	W5DX16* Wide angle Low profile	4.20mm	2.2	80.5 degree	5P	6.17mm	32.98	OV: OV16880 Samsung: 3P3SX	Hysonic A65S-8536-28D1 (M=6.5, P=0.25)	MP OK	o	o	o	o
	W5NY16* High illumination	4.47mm	2.0	75.4 degree	5P	6.30mm	32.21	OV: OV16880 Samsung: 3P3SX	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	o	o
	W5UY16* OIS High illumination	4.47mm	2.0	75.4 degree	5P	6.30mm	32.21	OV: OV16880 Samsung: 3P3SX	Mitsumi-OIS(ASA-LV195) TDK-OIS(TVA-652) (Barrel φ=6.18)	MP OK	o	o	o	o
	W5FY16* High illumination	4.47mm	2.2	75.4 degree	5P	6.30mm	32.04	OV: OV16880 Samsung: 3P3SX	ALPS-501A/502A (M=6.5, P=0.25)	MP OK	o	o	o	o
	F4503A*G High illumination	4.50mm	2.0	74.0 degree	5P	6.05mm	31.97	OV: OV16880 Samsung: 3P3SX	Mitsumi-Close Loop VCM (Barrelφ=6.10)	MP OK	o	o	o	o
	F4512A*G Low profile	3.94mm	2.2	81.5 degree	5P	6.17mm	35.40	Samsung: 3P3SX-Larger	Mitsumi-V78S85-L3 (Model of LD4)-(Model of LD10) (M=6.5, P=0.25)	MP OK	o	o	o	o
	F4512B*G Low profile	3.94mm	2.2	81.5 degree	5P	6.17mm	35.40	Samsung: 3P3SX-Larger	ALPS-901A (M=6.5, P=0.25)	Sample OK MP end of November,2015	o	Tooling	o	o
	F5512A*G High illumination Low profile	4.20mm	2.0	77.3 degree	5P	6.17mm	33.80	OV: OV16880 Samsung: 3P3SX/3P3SX_Larger	Mitsumi-Close Loop VCM TDK-Close Loop VCM (φ=6.18)	Need of tooling barrel mold	-	-	-	-
	F5512B*G High illumination Low profile	4.20mm	2.0	78.0 degree	5P	6.17mm	33.80	OV: OV16880 Samsung: 3P3SX/3P3SX_Larger	GX00 (Torque management holder of the KT start of work)→ ALPS-901A	Sample middle of November,2015 shipment	-	-	Tooling	Tooling
	F5601A*G High illumination	4.50mm	2.0	75.3 degree	6P	6.17mm	33.40	OV: OV16880 Samsung: 3P3SX	Mitsumi-Close Loop VCM TDK-Close Loop VCM (φ=6.18)	Need of tooling barrel mold	-	-	-	-
F5601C*G High illumination	4.50mm	2.0	75.3 degree	6P	6.17mm	33.40	OV: OV16880 Samsung: 3P3SX	Mitsumi-KAFA72S85 (M=6.5, P=0.25)	Sample OK	-	-	o	o	
F5601D*G High illumination	4.50mm	2.0	75.3 degree	6P	6.17mm	33.40	OV: OV16880 Samsung: 3P3SX	XPT-85B-BC36 (M=6.5, P=0.25)	Sample middle of December,2015 shipment	-	-	-	Tooling	
<b>16M ( Sensor: 1/2.6 inch, 1.12um )</b>											<b>MP mold</b>		<b>Test mold</b>	
<b>Type</b>	<b>Model</b>	<b>TTL</b>	<b>Fno</b>	<b>FOV</b>	<b>Comp onent</b>	<b>Max Image Circle</b>	<b>Lens CRA</b>	<b>Matching Sensor</b>	<b>VCM</b>	<b>Design/ Sample/ MP</b>	<b>Lens</b>	<b>Barrel</b>	<b>Lens</b>	<b>Barrel</b>
16M 1/2.6inch	C4602A*G OIS High illumination	5.30mm	2.0	77.0 degree	6P	7.30mm	33.80	Sony IMX234 Samsung 2P8	ALPS-701A(VCM) TDK-710(OIS) (Barrel φ=7.05)	MP OK	o	o	o	o
<b>16M ( Sensor: 1/2.4 inch, 1.305um )</b>											<b>MP mold</b>		<b>Test mold</b>	
<b>Type</b>	<b>Model</b>	<b>TTL</b>	<b>Fno</b>	<b>FOV</b>	<b>Comp onent</b>	<b>Max Image Circle</b>	<b>Lens CRA</b>	<b>Matching Sensor</b>	<b>VCM</b>	<b>Design/ Sample/ MP</b>	<b>Lens</b>	<b>Barrel</b>	<b>Lens</b>	<b>Barrel</b>
16M 1/2.4inch	B4609A*G OIS Low profile	5.20mm	2.2	77.4 degree	6P	8.200mm	33.41	OV: OV16860	Mitsumi-ASA-FV1C8 (Barrelφ=8.00)	Sample OK MP 2016Q1	Tooling	Tooling	o	o

20M ( Sensor: 1/2.6 inch, 1.00um )												MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/ Sample/ MP	Lens	Barrel	Lens	Barrel	
20M 1/2.6inch	C4602A*L OIS High illumination	5.30mm	2.0	77.0 degree	6P	7.30mm	33.80	Samsung 2T8	ALPS-701A(VCM) TDK-710(OIS) (Barrel φ=7.05)	MP OK	○	○	○	○	
21M ( Sensor: 1/2.4 inch, 1.12um )												MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/ Sample/ MP	Lens	Barrel	Lens	Barrel	
21M 1/2.4inch	B4611A*L High illumination	5.55mm	2.0	76.0 degree	6P	7.787mm	32.33	SONY: IMX230 Toshiba : T4KA7 OV: 21840	TDK-820 Mitsumi KAFF71SA5 (Barrel φ=7.90)	MP OK	○	○	○	○	
	B4609A*L OIS Low profile	5.20mm	2.2	77.2 degree	6P	8.200mm	33.41	SONY: IMX230 Toshiba : T4KA7 OV: 21840	Mitsumi-ASA-FV1C8 (Barrelφ=8.00)	Sample OK MP 2016Q1	Tooling	Tooling	○	○	
22.6M ( Sensor: 1/2.6 inch, 1.00um )												MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/ Sample/ MP	Lens	Barrel	Lens	Barrel	
22.6M 1/2.6inch	C4602A*P OIS High illumination	5.30mm	2.0	77.7 degree	6P	7.30mm	33.80	SONY: IMX318	ALPS-701A(VCM) TDK-710(OIS) (Barrel φ=7.05)	MP OK	○	○	○	○	
24M ( Sensor: 1/2.3 inch, 1.116 or 1.12um )												MP mold		Test mold	
Type	Model	TTL	Fno	FOV	Component	Max Image Circle	Lens CRA	Matching Sensor	VCM	Design/ Sample/ MP	Lens	Barrel	Lens	Barrel	
24M 1/2.3inch	B4609A*L Low profile	5.20mm	2.2	77.2 degree	6P	8.200mm	33.41	OV: 23850 Samsung: 2X8	Mitsumi-ASA-FV1C8 (Barrelφ=8.00)	Sample OK MP 2016Q1	Tooling	Tooling	○	○	