

Table 2: Vendors with solutions able to play in the camera phone space and OIS

Image Sensor	Lens	AF Driver	OIS controller	OIS VCM	Gyro	Module
Aptina	Fujinon	ADI	Custom	Foxconn	InvenSense	Foxconn
OVT	Foxconn	Insilica	Maxim	LG		Mitsumi
Panasonic	KonicaMinolta	Maxim	Renesas	Mitsumi		LG
Sharp	LG	Renesas	Rohm	Samsung		Samsung
Sony	Samsung	Rohm	Sanyo	Sankyo		Sankyo
ST	VarioOptics	Sanyo		TDK		Sony

The table above is not a comprehensive list though it does cover most key players able to compete in this market. Despite its diminutive size, the camera module has a complex ecosystem with vendors from those specializing in making the camera shell or OIS housing to those assembling the whole module for tuning and integration into a phone. As the table shows, InvenSense gyros and *MotionProcessing* solutions are the only options currently being considered for the OIS module as they meet size, integration, robustness, performance and a whole system approach to reducing the cost required for the handset application.

experience, all with an instantaneous and accurate 1:1 response. Now a smart phone can capture a high quality photo of the family inside a new restaurant, located with the phone and then tagged as a location to send to a favorite friend with the flick of a hand. From abating hand jitters for high quality images to converting gestures to commands, motion processing is the next natural migration of human interface design to be embedded in smart phones.

From Detecting Hand Jitter to the Magic Wand

The efficient and scalable design of InvenSense MEMS motion processors offers practically limitless integration options paving the way for other possibilities for OIS enabled camera phones. The MPU-3000 compatibility with IDG-2000 gives the phone vendor turn-key options for an OIS-enabled camera phone or a full motion processing-enabled phone with gesture recognition, location based services and gaming