



SH6K3-B, SH4K5-B, SH3K7-B

(Hybrid TDI Linear Image Sensor Module)

The SH6K3, SH4K5, and SH3K7 are 6K, 4K, and 3K resolution hybrid linear image sensor modules with high sensitivity and low dark current. 256 lines (128 lines for SH3K7-BA) of CCD pixels are used for TDI (time delayed integration) operation, by which the sensitivity can be increased to 256 (or 128) times. The on-chip 12-bit column ADC and multi-port digital output data make high-speed output data rate up to 2560 MSPS and 100k scan lines/sec with full resolution.

FEATURES

- Optical Size: 23.53mm
- Max. 100k Scan Lines/s with 10-bit Resolution at 80MHz Main Clock
- Support for Bi-direction Scanning
- 9~12bit on-chip ADC
- 12-channel X 12b parallel digital data output
- 7-bit Programmable Gain Control in Logarithmic Scale (-6dB ~ +26dB)
- Single Power Supply Voltage: 3.3V
- Variable I/O Levels: 1.8V ~ 3.3V
- Connector : 2 x 100p Panasonic Con.

Model Name	Description	Unit Pixel (μm ²)	Effective Resolution (pixels)	Optical Black (pixels)	TDI rows (lines)
SH6K3-B	High-speed, 6K-resolution, 3.5μm-pitch, 80MHz Main Clock, 256-stage TDI linear image sensor module	3.5 × 3.5	6688	32	256
SH4K5-B	High-speed, 4K-resolution, 5.0μm-pitch, 80MHz Main Clock, 256-stage TDI linear image sensor module	5.0 × 5.0	4672	32	256
SH3K7-B	High-speed, 3K-resolution, 7.5μm-pitch, 80MHz Main Clock, 128-stage TDI linear image sensor module	7.0 × 7.0	3328	32	128