SH23K3-B, SH16K5-B, SH12K7-B

(Hybrid TDI Linear Image Sensor Module)

The SH23K3-B, SH16K5-B, and SH12K7-B are 23K, 16K, and 12K resolution hybrid linear image sensor modules with high sensitivity and low dark current.256 lines (128 lines for SH12K7-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 60k scan lines/sec with full resolution.

FEATURES

- Optical Size: 82.32mm
- Max. 100k Scan Lines/s with 10-bitResolution at 80MHz Main Clock
- Support for Bi-direction Scanning
- 9~12bit on-chip ADC
- 42-channgel 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 : 4 x 120p JAE Con.

Model Name	Description	Unit Pixel (um²)	Effective Resolution (pixels)	Optical Black (pixels)	TDI rows (lines)
SH23K3-B	High-speed, 23K-resolution, 80MHz Main Clock, 256-stage	3.5 × 3.5	23488	32	256
SH16K5-B	High-speed, 16K-resolution, 80MHz Main Clock, 256-stage	5.0 × 5.0	16432	32	256
SH12K7-B	High-speed, 12K-resolution, 80MHz Main Clock,128-stage	7.0 × 7.0	11728	32	128