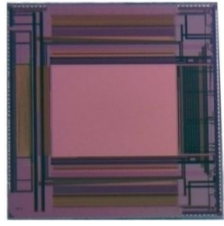
	Read Out Integrated Circuit (ROIC) 384 X 288	
SCL Part No.	SC1243-0	

PRODUCT DESCRIPTION:

The ROIC developed at SCL is of active array size 384 x 288 with 2 dummy rings around active array. This ROIC is a slave mode device which needs master clock, master reset, frame sync and Integration signal as inputs and gives out Line sync signal, Data Synchronization signal to user along with two analog outputs. It supports two readout modes and works in snapshot mode only. User can choose various operating modes by programming control register using serial interface and can even use the default mode of operation. Programming of control register can be done by writing the appropriate control word into the control register with the help of SPI.

FEATURES:

- Basic Array Size: 384 x 288
- Array Size (Dark Rings): 388 x 292
- Pixel Pitch: 15 μm
- Indium Bump Opening: 7 μm
- Output Ports: 2
- Output Rate: 20 MHz (Analog)
- Frame rate (Max): 140 fps
- Output Range (Min): 1 V
- Readout mode: ITR/IWR
- Temperature Sensors: 4
- Programmable Well Capacitance: 3 & 2 Me
- Total Average Power: 94 mW
- H-flip and V-flip: Yes
- Operating Temperature (T_A): 77K to 100K
- SCL 0.18 μm CMOS technology

BLOCK DIAGRAM:

