

ISM-MT9M131-Color

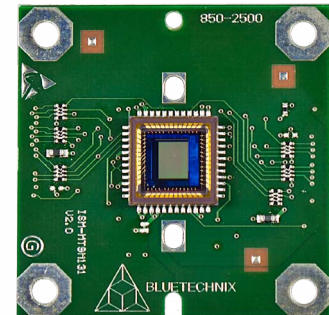
Image Sensor Module

The ISM-MT9M131-Color integrates Aptinas MT9M131 image SoC (System-on-a-Chip), oscillator, voltage control and a M12 or CS-mount lens-holder to support numerous M12 or CS-mount lenses at a size of 30 x 40mm.

The MT9M131 CMOS digital image sensor from Aptina has an active-pixel-array of 1280H x 1024V (1.3MP). It is an ultra low power, cost effective, progressive scan image sensor with a completely integrated camera system (SoC) which has superior low-light performance. The sensor can be programmed via a simple I²C interface and offers some sophisticated camera functions such as auto exposure control, auto white balance (AWB), auto black reference (ABR), auto flicker avoidance, auto color saturation, auto defect identification and correction. The sensor is able to capture in continuous mode for videos or single frame mode for clear sharp images for both low light and normal scenes.

Features

OPTICAL FORMAT	1/3-inch (5:4)
ACTIVE ARRAY	1280H x 960V (1.3MP)
IMAGING AREA	4.6mm(H) x 3.7mm(V)
PIXEL SIZE	3.6 x 3.6µm
RESPONSIVITY	1.0 V/lux-sec (550nm)
SNR MAX	44 dB
MAX DYNAMIC RANGE	71dB
FRAME RATE	15fps at 54 MHz (SXGA 1280 x 1024) 30fps at 54 MHz (VGA 640 x 480) 60fps at 54MHz (640 x 512)
CHROMA	RGB Bayer pattern
SHUTTER TYPE	ERS - Electronic Rolling Shutter
DATA RATE	27Mb/s
INPUT CLOCK RANGE	50MHz
MASTER CLOCK	50MHz
ADC RESOLUTION	10-bit, dual on-chip
DATA FORMAT	10 bit parallel
SUPPLY VOLTAGE	Power supply 2.5V – 3.1V I/O digital reference 1.7V – 3.1V
POWER CONSUMPTION	170mW SXGA at 15 fps (54 MHz EXTCLK) 90mW VGA at 30 fps (54 MHz EXTCLK)
OPERATING TEMPERATURE	-30°C to +70°C
RoHS COMPLIANT	Yes
BLT-ISM-CONNECTOR	Yes
LENS HOLDER	M12 or CS-mount objective lens holder
CS-MOUNT COMPATIBLE	Yes
SIZE	40 x 40mm



ISM-MT9M131-Color

Applications

- » Security
- » Biometrics
- » Videoconferencing
- » Toys
- » 802.11 wireless network cameras
- » Power line modem cameras
- » IP cameras
- » uPNP AV, WiFi, UWB cameras
- » Small office monitoring
- » Home monitoring

Ordering Information

Order No.	Info
100-3202-2	ISM-MT9M131-Color

get further details at
<http://www.bluetechnix.com/goto/ism-mt9m131>

BLUETECHNIX MECHATRONISCHE SYSTEME GMBH

Waidhausenstrasse 3/19
1140 Wien, Austria
www.bluetechnix.com

Tel.: +43 (1) 9142091 x 0
Fax.: +43 (1) 9142091 x 99
Email: office@bluetechnix.at

