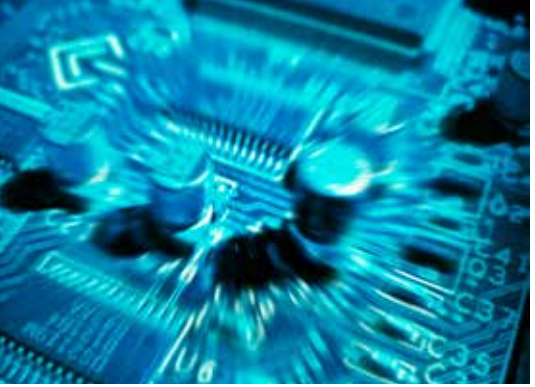

S100 Series

Next Generation Smart Camera

- High Performance: Dual Core Cortex-A9 processor and Xilinx FPGA
- IP-67 Rated enclosure
- Compact size: only 45x45x41 mm
- Programmable FPGA for image acquisition and preprocessing
- Open system with Linux O.S.
- Multiple resolution: VGA, 2 and 4 Megapixels global shutter CMOS image sensor

- High speed acquisition: up to 250 fps for VGA resolution
- Complete interface and communication capabilities: Gigabit Ethernet, digital I/O, RS232/485 serial ports

Smart & Fast Inspection

High-Speed acqusition

The S100 allows high-speed acquisition, from 250 Fps for VGA sensor up to 35 Fps for 4 megapixels sensor.
The frame rate of the camera can be further increased thanks to the windowing features: capturing only a portion of the sensor allows higher frame rates for smallest regions of interest.

FPGA

The image acquisition and image preprocessing are performed by dedicated FPGA in real time.
Using graphical tool, it is possible to progam the FPGA for image preprocessing.

Interface and Communication

The integration of the S100 Smart Camera is made easy by the full-featured set of interfaces available: Gigabit Ethernet, RS232, RS485, 2 inputs, 2 outputs, 2 strobe outputs.

Architecture

The S100 Smart Camera features a Dual Core Cortex-A9 800MHz CPU and an Xilinx Artix 28K Logic Cells FPGA working closely together.
Thanks to Tattile's technology based on FPGA, this smart camera can guarantee the real-time execution of critical functions such as image capture, image pre-processing, and I/O.

Compact size

Thanks to its compact size, it can be easily integrated into any machine and production line.

Open System

Thanks to the use of Linux O.S., it is possible to develop Vision Application with Tattile software or third parties library / software.

IP-67

IP-67rated housing of S100 Smart Camera allows the installation even in harsh environment.

Tattile

Custom Vision Solutions

S100 Series

Next Generation Smart Camera

Technical Data

Device	S110	S120	S130
Resolution	640x480	2048x1088	2048x2048
Frame rate	250 fps	70 fps	35 fps
Sensor type	1/3" CMOS	2/3" CMOS	1" CMOS
Sensor model	CMV300	CMV2000	CMV4000
CPU	Dual Core ARM Cortex-A9 800MHz		
System RAM	512 MB		
Flash Memory	Secure Digital 8 GB (up to 32 GB)		
FPGA	Xilinx Artix-7 28K LEs		
Lighting direct channel	2 channels		
Integrated illumination	Optional removable		
Strobe output	2		
Digital inputs	2		
Digital outputs	2 PNP		
LAN	Gigabit Ethernet		
Serial port	RS232-RS485		
Internal Protection	IP67		
Lens	C-mount		
Operating system	Linux		
Power supply	24 VDC		

S100 Series - Part Number	
F01616	S100 SMART CAMERA 640x480 MONO
F01617	S110 SMART CAMERA 640x480 COLOR
F01618	S120 SMART CAMERA 2048x1088 MONO
F01619	S120 SMART CAMERA 2048x1088 COLOR
F01620	S130 SMART CAMERA 2048x2048 MONO
F01621	S130 SMART CAMERA 2048x2048 COLOR