

# Cheetah2 Series Smart Camera Brief

## Features

1. Intel® ATOM™ SoC E3950 2.0GHz, quad cores  
Compared to E3845 (used in Cheetah1):  
50% CPU performance up with same power consumption  
4.5 times GPU performance up for deep learning algorithm acceleration  
3.5 times DDR bandwidth up
2. 4GB LPDDR4-2400, 128-bit data bus, soldered onboard
3. 64GB storage for OS, soldered onboard
4. 64-bit OS support: Windows 10 IoT Enterprise, Ubuntu 18.04.4
5. Support hardware H.264 4K2K/37fps video encoder
6. SONY CMOS sensors, resolution from 1.6MP to 31MP
7. The software, dimensions and IO ports are compatible with Cheetah1
8. Wide operation temperature -40°C to +80°C
9. 3-year warranty

## Applications

Intelligent Transport System (ITS)

Intelligent Surveillance

## Specifications

<b>CPU Model</b>	Intel® ATOM™ SoC E3950, soldered onboard
<b>CPU Type</b>	2.0GHz, quad cores, 2MB L2 cache, 64-bit
<b>GPU Type</b>	Generation 9 graphics, support Intel® OpenVINO™
<b>DRAM</b>	4GB LPDDR4-2400, dual-channel, soldered onboard
<b>Storage</b>	64GB eMMC5.1 Flash for OS, soldered onboard 1x microSDXC card slot for extended storage
<b>OS Support (64-bit)</b>	Windows 10 IoT Enterprise, Ubuntu 18.04.4
<b>USB Port</b>	1x USB 3.0 port
<b>Display Port</b>	1x HDMI port
<b>Network Port</b>	1x Giga Ethernet
<b>Serial Port</b>	1x RS232, 1x isolated RS485
<b>Digital I/O</b>	1x isolated input, 2x isolated outputs
<b>Watchdog Timer</b>	1 to 256 seconds, setup by software
<b>Others</b>	P-IRIS control, day-night function, switchable polarizer Temperature sensor, power sync, unique chip ID encryption
<b>Power Supply</b>	20 to 40VDC (24VDC recommended ), 10 to 15W
<b>Operation Temperature</b>	-40°C to +80°C wide temperature
<b>Construction</b>	Rugged full metal casing, fanless
<b>Dimensions and Weight</b>	66.5×72.8×140 mm, 0.8 kg
<b>Regulation</b>	CE

## Profile



Figure 1-1 Profile

## Dimensions

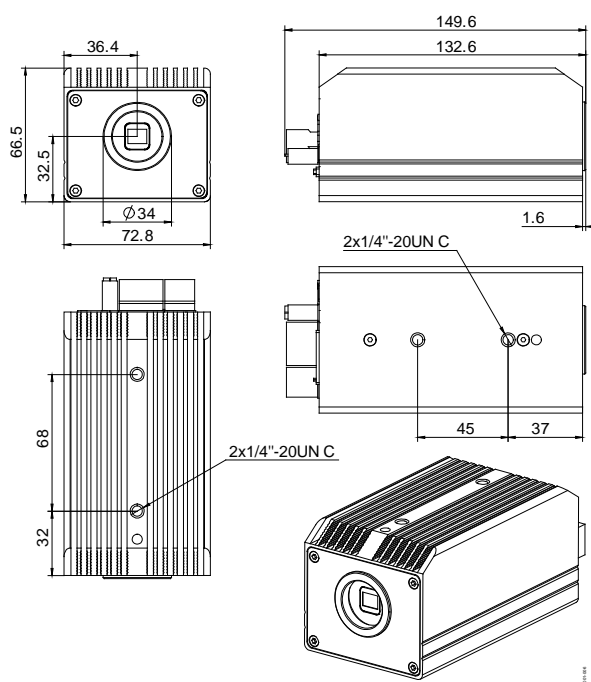


Figure 1-2 Dimensions

Notes:

- [1] Unit: mm
- [2] Materials: aluminum with anodizing process
- [3] Color: black