

CV2S System On Module

CV2S SoM is a low-power, ready-to-integrate and production ready camera platform for rapid prototyping, quick development and production of robotics, smart security and other applications.

Key features

LPDDR4 16 Gbit

32 GB eMMC 5.1

Stereovision engine

up to 6 image sensors

24 MIPI lanes


Ambarella™
CV2S88

64-bit quad-core Arm® Cortex®-A53 CPU up to 1 GHz

CNN / DNN

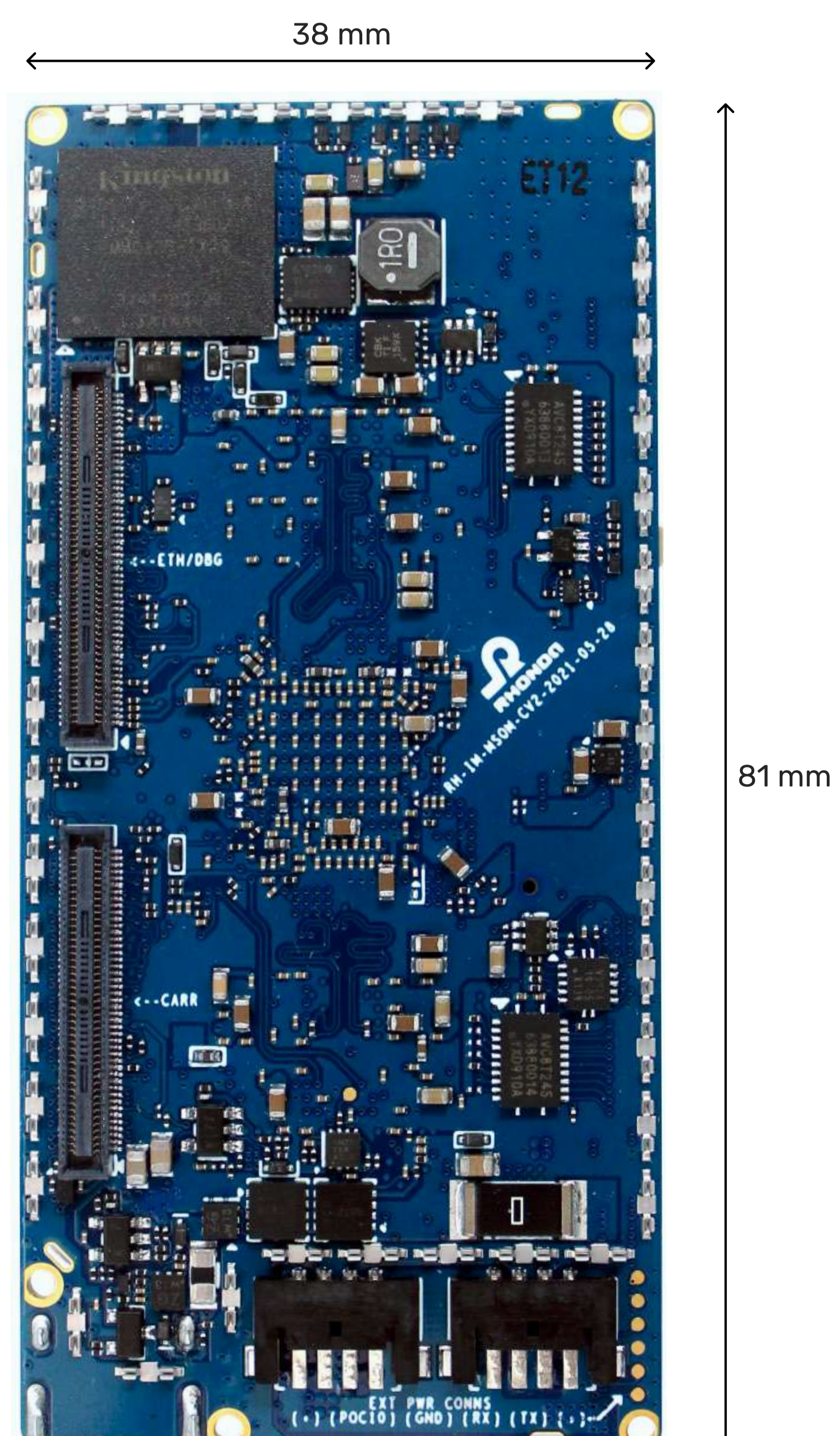
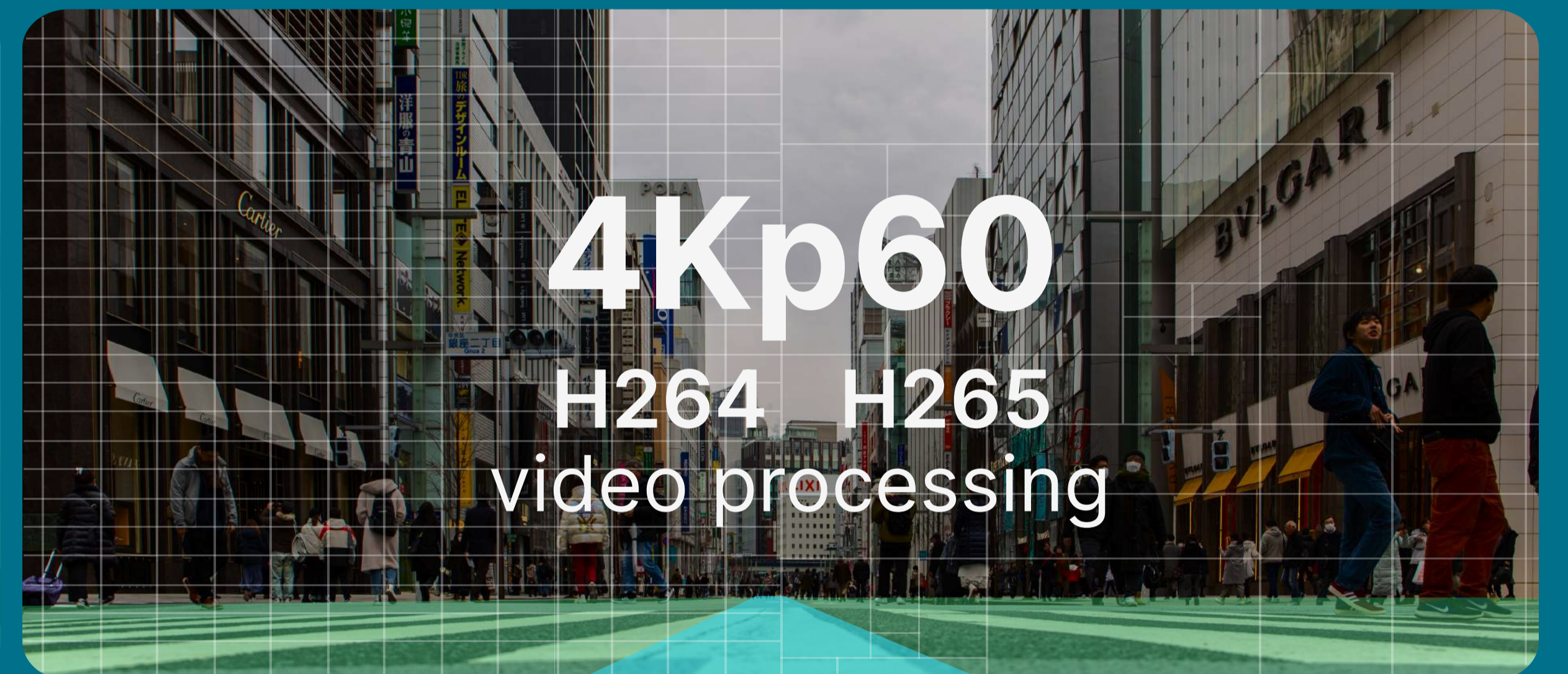
CVflow

HW accelerator

Wi-Fi
802.11a/b/g/n/ac

Over 30
Image Quality
Filters

4Kp60
H264 H265
video processing



CV2S SoM General Specifications

Ambarella® CV2S88™ SoC

Video processing up to 4Kp60 / 8MP60

Rich sensor interface:

- up to 6 image sensors:
 - up to 4 MIPI or SLVS lanes each
- up to 2 image sensors:
 - MIPI up to 8 lanes each
 - SLVS up to 12 lanes each

Rich video output interface:

- 4-lane MIPI DSI® / CSI-2 & FPD out
- 16-bit parallel LVCMOS
- HDMI ® 2.0
- Analog CVBS

16Gbit LPDDR4 DRAM

32GB internal eMMC 5.1 storage

WiFi (802.11a/b/g/n/ac)

Wide range of peripheral interfaces:

- Gigabit RGMII
- USB 2.0 HOST / DEVICE
- MCPI, DSI
- I²S
- UART
- JTAG
- I²C
- SPI
- ADC
- GPIO

On-board digital microphone

On-board USB-C slot

On-board Micro SD slot
SD, SDHC, SDXC card support

On-board button and 3-color LED for basic UI

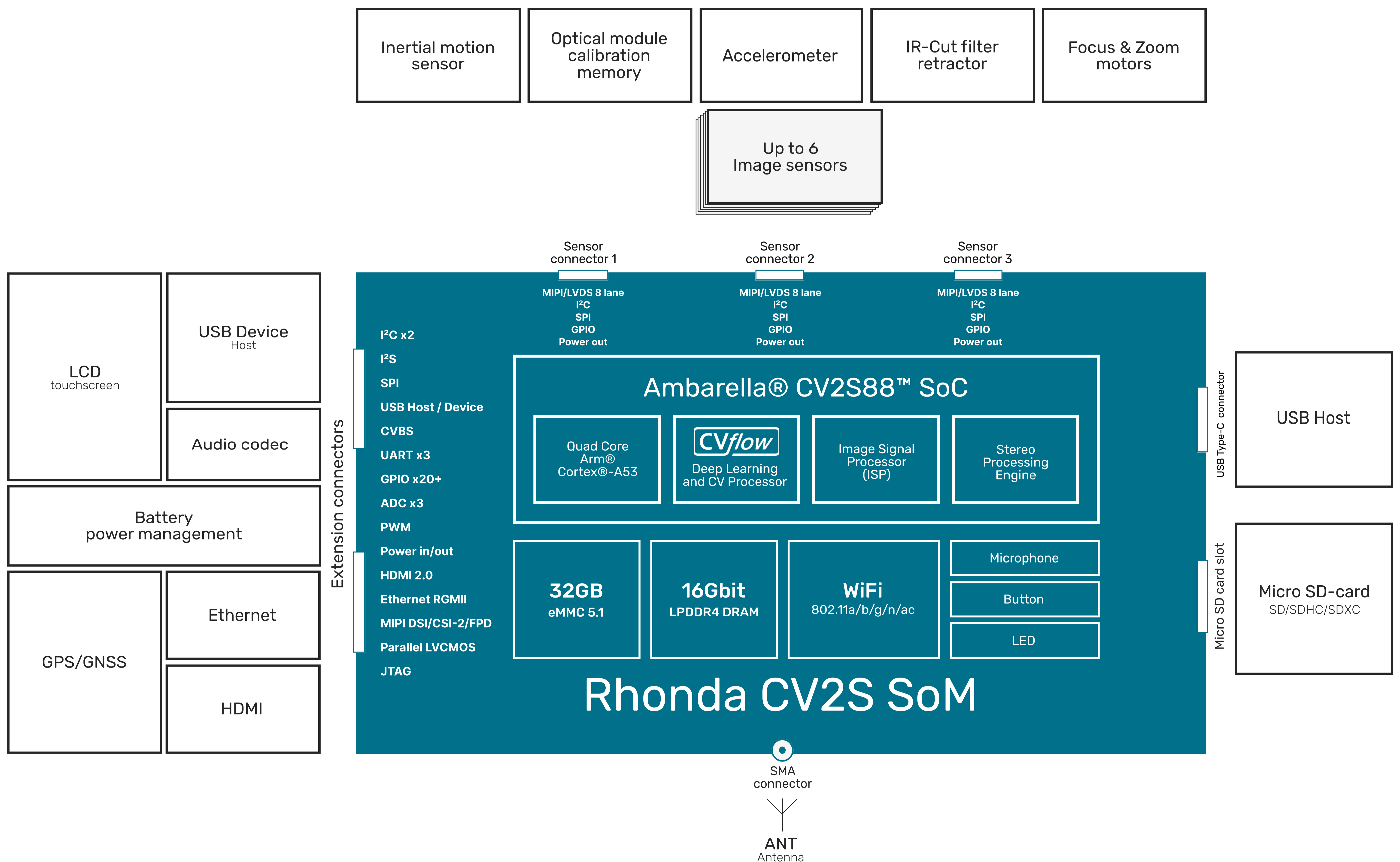
Main board physical dimensions 81 × 38 mm

Operating temperature -20°C to 85°C

Power input options:

- 5V from USB
- 3.5-5V from board-to-board connector
- 3.5-5V dedicated power connector

CV2S SoM Block Diagram



Rhonda CV2S SoM product brief v1.3

Copyright Rhonda Software LLC. All rights reserved. Rhonda Software, and the Rhonda Software logo are trademarks of Rhonda Software LLC. All other brands, product names and company names are trademarks of their respective owners. The information in this document is believed to be reliable, but may project preliminary functionality not yet available. Rhonda Software LLC makes no guarantee or warranty concerning the accuracy and availability of said information and shall not be responsible for any loss or damage whatever nature resulting from the use of, or reliance upon it. Rhonda Software LLC does not guarantee that the use of any information contained herein will not infringe upon patent, trademark, copyright, or other rights of third parties. Rhonda Software LLC reserves the right to make changes in the product and /or its specifications presented in this publication at any time without notice.



Contact us today

salesteam@rhondasoftware.com

rhondasoftware.com