

Single Board Computer

12185-AND-SBC-MT8365

Datasheet v1.0

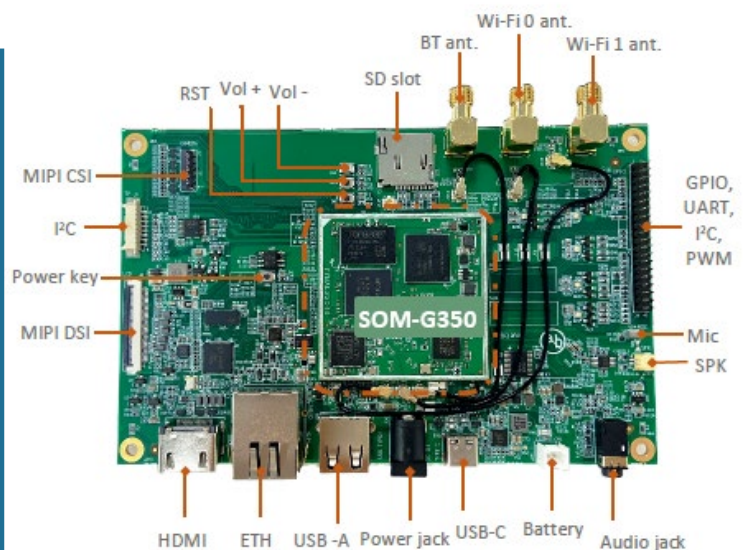


AND-SBC-MT8365 is Single Board Computer built around MediaTek G350 chipset which integrates a fast 2GHz quad-core ARM Cortex-53 CPU, high performance graphics, APU and audio engine for voice and vision processing edge AI applications.

This powerful SBC supports H.265/H.264 video codec for applications requiring high quality media. It offers a wide range of I/O connectivity including Gbit Ethernet, Wifi 802.11ac and Bluetooth 5.0, ideal for a vast range of IoT requirements.

Key Features:

- MediaTek MT8365 (G350), quad-core Cortex-A53, 2GHz
- ARM-Mali G52 GPU
- Cadence® Tensilica® VP6 APU for AI
- Internal HiFi4 audio engine DSP
- 4GB RAM and 32GB eMMC
- Ethernet, Wifi & BT connectivity
- RTC and watchdog supported
- Linux and Android OS



Also available as a System-on-Module

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System

Feature	Specification
CPU	MTK MT8365 (G350), Quad-core ARM Cortex-A53 processor, up to 2.0GHz
GPU	ARM Mali-G52 GPU, 600MHz
APU	Cadence® Tensilica® VP6 processor, 700MHz at 0.825V
Memory	4GB LPDDR4
Storage	32GB eMMC 5.1
EEPROM	2Kb (for hardware configuration information)
PMIC	MT6390

Network

Feature	Specification
Ethernet	1 x RJ45, 10M/100Mbps
Wi-Fi and Bluetooth	802.11 1/b/g/n/ac + Bluetooth 5.0

Media

Feature	Specification
Video Processing	1080p60, H.265/H.264/JPEG video encoder 1080p60, H.265/H.264/VP9 video decoder
Audio DSP	Tensilica® HiFi4

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I/O

Feature	Specification
Display	1 x 4-lane MIPI DSI / 1 x HDMI, up to 1920 x 1080
MIPI CSI	1 x 4-lane MIPI CSI, 13MP @ 30fps
Audio	1 x 3.5mm combo audio jack, 1 x speaker connector, 1 x DMIC
USB	1 x USB 2.0 type-A 1 x USB Type-C (USB 2.0 OTG supported)
I ² C	2 x I ² C (one connector, one on the GPIO header)
GPIO Header	9 x GPIO, 1 x Debug UART (1.8V), 2 x Communication UART (TTL), 1 x I ² C, 1 x PWN
SD Slot	1 x MicroSD slot
Key	1 x Power key, 1 x Reset key, 1 x Volume+ key, 1 x Volume- key
Battery	1 x Battery connector

Electrical, Mechanical and Environmental Specifications

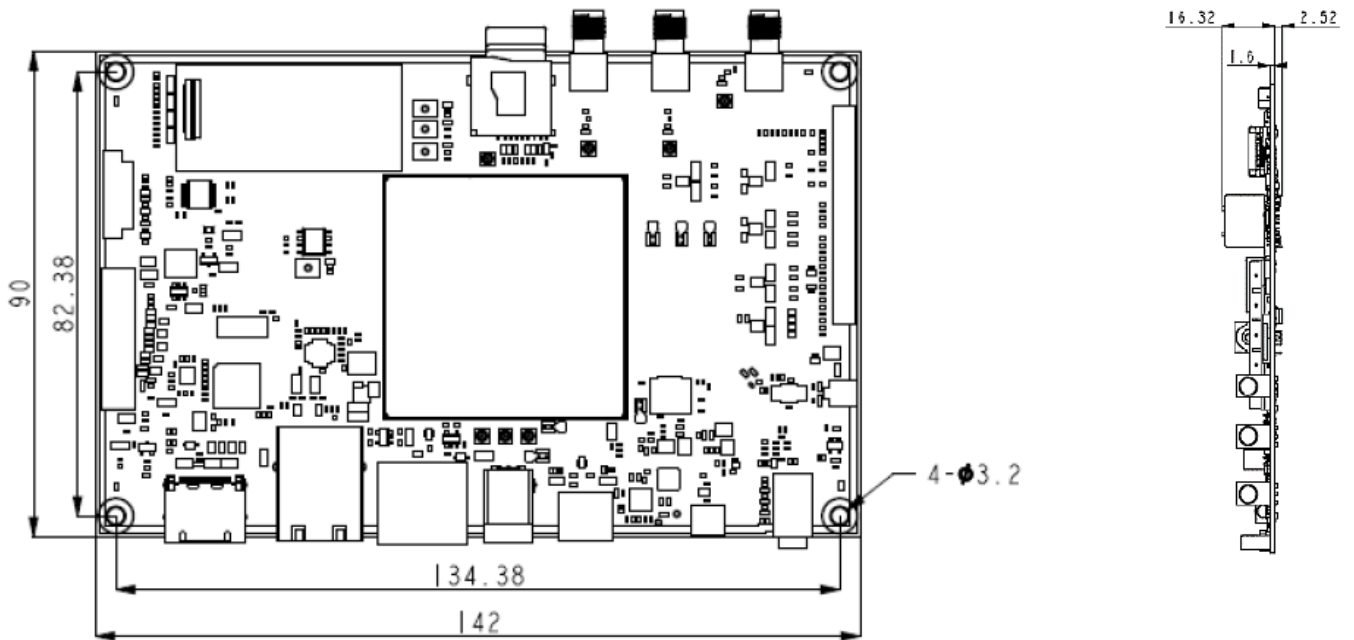
Feature	Specification
Power Input	5V/1A DC input, 1 x power jack
Dimensions	142 x 90 x 18.84mm
Operating temperature	-20° to +60° C.
Storage temperature	-30° to +70° C
Relative humidity	≤95% RH (non-condensing)
Certification	CE, FCC, CCC

Software

Feature	Specification
OS Support	Android 10+, Linux Yocto, Linux (support by request)

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Dimensions



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Evaluation Kit

Hardware

- AND-SBC-MT8365-EVB evaluation board (carrier board + SOM)
- 7" open frame touchscreen monitor (1024 x 600, 300 nits)
- Power adapters (5VDC for board, 12VDC for monitor)
- Touch USB cable
- HDMI cable



Rev no.	Rev date.	Contents	Page
v1.0	08.08.2025	New creation	