MeiG-SNM500

Support Wi-Fi & BT

SNM500 adopts Qualcomm QCM2150 platform, 4-core A53(4* 1.3GHz) with 28nm FinFET process, 64bit ARM. It supports decode/encode up to 1080P@30fps, H.264, HD+ screen resolution, and dual ISP cameras. SNM500 is equipped with Android 10 operating system and a board memory of 1GB+8GB (2GB+16GB, and 3GB+32GB).

SNM500 can provide functions such as voice, SMS, address book, 2.4G/5G WiFi, BT. It supports dual 800W 3D camera or the depth-of-field camera, which can be widely used in intelligent POS cash registers, logistics terminals, VR Camera, intelligent robots, video recorder, security, automotive equipment, intelligent information collection equipment, intelligent handheld terminals, UAV and other products.

Main Advantage

- ✓ Support main screen display HD+ (1440x720)@60pfs
- ✓ Support Dual ISP, Dual Camera (8M+8M) 13MP camera
- ✓ Integrate multi-constellation GNSS receivers, fast and accurate positioning in different environments
- ✓ Support 1080P @30fps video en/decoding

Qualcomm 4*A53@1.3GHz

Adreno™ Adreno 308

Android 10

BT 4.2 (BR/DDR+BLE)

IEEE 802 11 a/b/g/n/ac

H.264, HEVC,VP8

LGA+LCC

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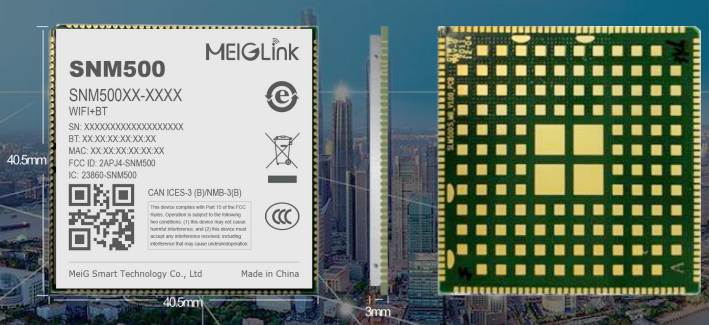

Audio & Video

Support VoLTE Ultra HD voice calls SRVCC/
CSFB voice fallback technology
24-bit/192kHz High fidelity music playback
Video codec: 1080P @30fps
WiFi video codec: 1080P @30fps

Display Interface

4-lane MIPI_DSI
HD+(1440 x 720)@60fps

Camera Interface

Main camera: 4-lane MIPI_CSI
Auxiliary camera: 2-lane MIPI_CSI
Max rate: 2.1Gbps/lane, support 13M pixels

Touch Screen Interface

• Capacitive touch screen

Audio Interface

• Analog output: speaker, earpieces, earphone
• Analog input: 3xmicrophone, 1 x noise reduction microphone

Other Interface

USB: USB 2.0*1, support USB OTG
I2C: x5
(U)SIM: x2 (1.8V/2.95V)
UART: x3 (support HW flow control, MAX 4Mbps）
SD card: x1 (SD 3.0, 4-bit SDIO)
PWRKEY: 1.8V，Internal pull-up
SPI: x5
ADC: x2
GPIO：*24
Motor drive：x1
LED: x1
Antenna: WiFi & BT antenna

Outstanding Interface

WLAN: 2.4G/5G, 802.11 a/b/g/n/ac
BT: BT2.1+EDR/3.0/4.1 LE/4.2 BLE
Built-in charge IC and gauge meter
Support DSDS
Firmware update via USB

General Feature

OS: Android 10
Storage：
8GB eMMC+1GB LPDDR3 （default）
16GB eMMC+2GB LPDDR3 （optional） Operating Temperature: -30°C ~ +75°C
Storage Temperature: -40°C ~ +85°C
Size: 40.5mm × 40.5mm × 2.8mm
Package: LCC+LGA
Weight: 13.0g

Certification

CCC

*: means under development

Regulatory Compliance Statement

FCC Statement:

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC Statement:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ce matériel est conforme aux limites de dose d'exposition aux rayonnements, CNR-102 énoncée dans un autre environnement.cette eqipment devrait être installé et exploité avec distance minimale de 20 entre le radiateur et votre corps.

The user manual for local area network devices shall contain instructions related to the restrictions mentioned in the above sections, namely that:
(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
(iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

(i)Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.
(ii) le gain d'antenne maximal autorisé pour les appareils dans les bandes 5250-5350 MHz et 5470-5725 MHz doivent respecter le pire limiter; et
(iii) le gain d'antenne maximal autorisé pour les appareils dans la bande 5725-5825 MHz doivent respecter le pire limites spécifiées pour le point-à-point et l'exploitation non point à point, le cas échéant.

Operational use conditions

Module has professional users use condition limitations, Host product manufacturer please ensure giving such warning like "Product is limited to professional users use" in your product's instruction.

Antenna used

Antenna Type: Dipole Antenna
Antenna Gain: 1dBi

Labelling Instruction for Host Product Integrator
Please notice that if the FCC and IC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. For FCC, this exterior label should follow “Contains FCC ID: 2APJ4-SNM500”. In accordance with FCC KDB guidance 784748 Labeling Guidelines. For IC, this exterior label can use wording “Contains IC: 23860-SNM500”.
§ 15.19 and RSS-Gen Labelling requirements shall be complied on end user device. Labelling rules for special device, please refer to §2.925, § 15.19 (a)(5) and relevant KDB publications. For E-label, please refer to §2.935.

Installation Notice to Host Product Manufacturer
The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module.
The module is limited to installation in mobile application, a separate approval is required for all other operating configurations, including portable configurations with respect to §2.1093 and difference antenna configurations.

Antenna Change Notice to Host manufacturer
If you desire to increase antenna gain and either change antenna type or use same antenna type certified, a Class II permissive change application is required to be filed by us, or you (host manufacturer) can take responsibility through the change in FCC ID and IC ID (new application) procedure followed by a Class II permissive change application.

FCC other Parts, Part 15B Compliance Requirements for Host product manufacturer
This modular transmitter is only FCC authorized for the specific rule parts listed on our grant, host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.
Host manufacturer in any case shall ensure host product which is installed and operating with the module is in compliant with Part 15B requirements.
Please note that For a Class B or Class A digital device or peripheral, the instructions furnished the user manual of the end-user product shall include statement set out in §15.105 Information to the user or such similar statement and place it in a prominent location in the text of host product manual. Original texts as following:

For Class B
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

For Class A
Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.