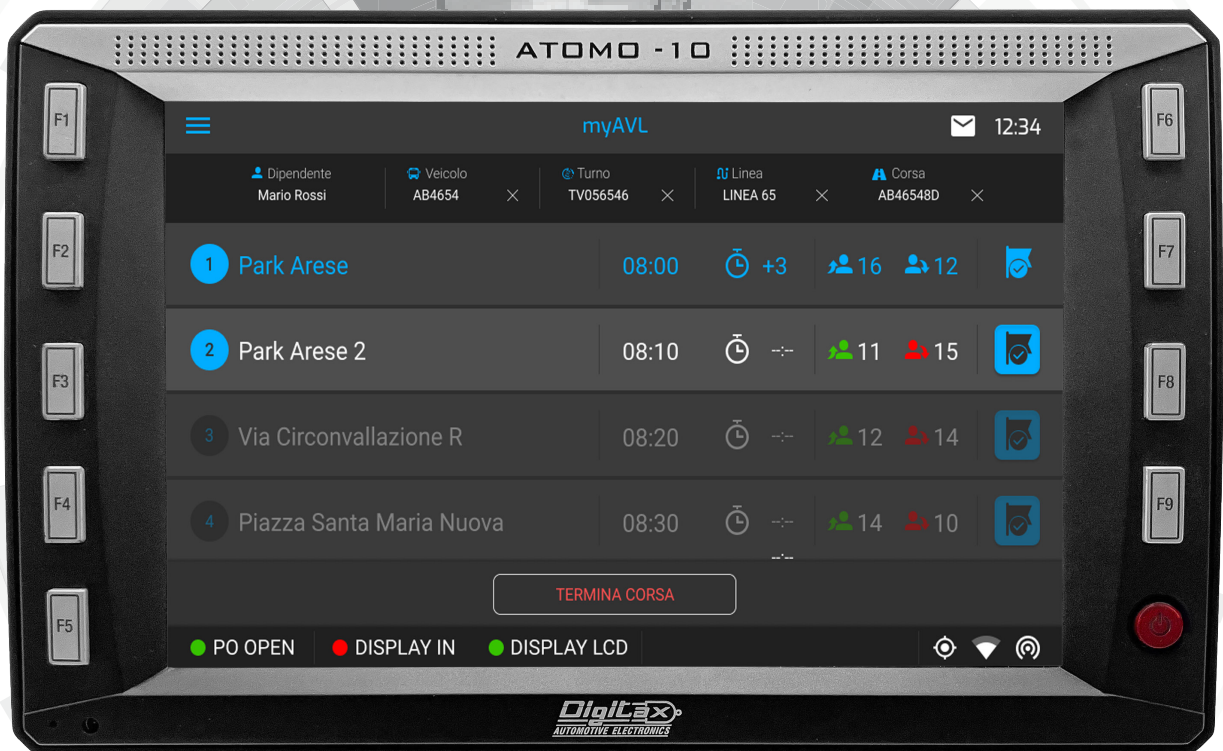


# ATOMO -10 MDT





# ATOMO - 10 MDT

The new ATOMO – 10 by Digitax is the solution for those companies and systems integrators who need to provide their customers with a professional, certified, flexible and modular Mobile Data Terminal (MDT) specifically designed to fulfill the requirements of applications like public transportation, fleets and special vehicles managements and many others.

ATOMO – 10 is available as a stand alone Mobile Data Terminal (ATOMO – 10 MDT) produced and provided directly by Digitax, to allow the maximum flexibility for new setups or existing installations updating. The use of standard communication protocols makes ATOMO – 10 MDT able to be interfaced also with any other manufacturers ticket validators and printers, when required.

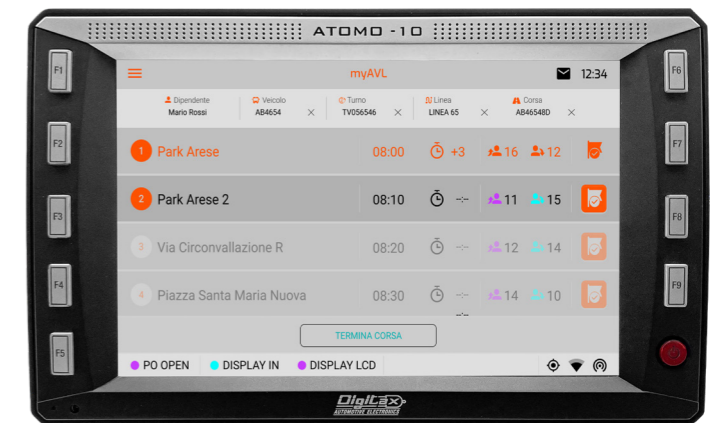
ATOMO – 10 MDT is equipped with a revolutionary Android Platform On Module allowing the device to be upgraded at any time to the latest release of Android HW Platform, OS, network/modem, 4G and 5G, Wifi and Bluetooth.

Features like customisable user interface, navigation, job dispatching and many others are also available with ATOMO – 10 MDT while Digitax Ticket Validators are available both in onboard and remote configurations and with different skins (grey, yellow, green) on request.

ATOMO – 10 MDT is a Smart Mobile Data Terminal designed to acquire and process a huge number of different, in the format and complexity, inputs coming from the many different peripherals typically used in the applications where a MDT is requested.

In particular ATOMO – 10 MDT offers the possibility of interacting with passive peripherals, removing the need of any signal pre or post processing in specific devices or in the peripherals themselves. Smart peripherals can be easily managed by ATOMO – 10 MDT as well. The use of ATOMO – 10 MDT allows to place in one device, ATOMO -10 MDT itself, the total complexity and the criticalities of the whole architecture reducing the number of the smart components needed for the implementation of the integrated systems.

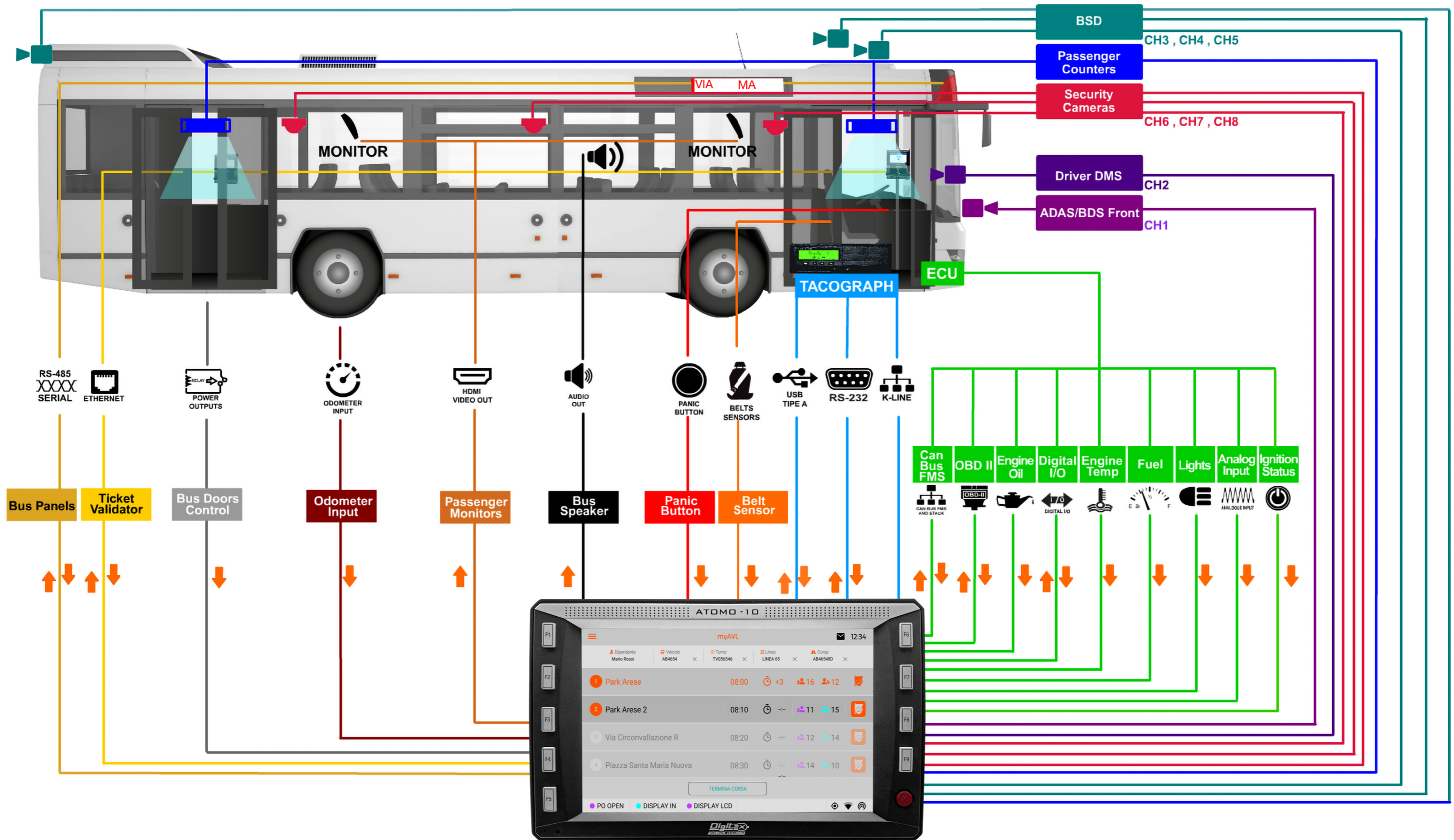
Many benefits come from this revolutionary approach like the cost reductions related to architecture installation, the easier defects detection, maintenance and assistance.



- ANDROID 10
- BACKUP BATTERY
- RAM 2GB-4GB / STORAGE 16GB-64GB
- WIFI 2.4GB/5G
- CORTEX A7/A53 KRYO 360
- 16:9 DISPLAY 10.1" 1K NITS
- GPS
- DIGITAX SDK
- ADRENO 506/619
- EMBEDDED MNDVR
- 4G LTE
- OCTA-CORE 1.8 GHz
- 9-AXIS ACCELEROMETER
- BLUETOOTH 4.2

# ATOMO - 10 MDT

## DIRECT INTERFACES

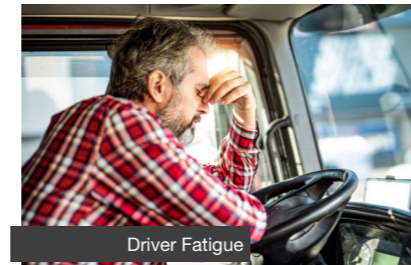
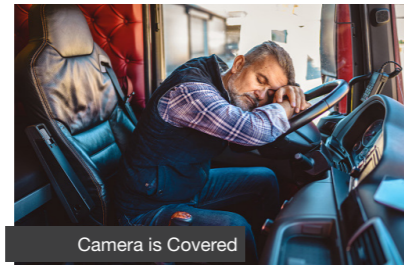
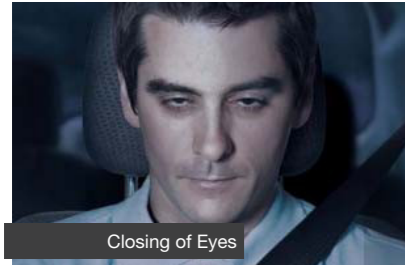


# ATOMO -10 MDT

## EMBEDDED HYBRID MNDVR -AI DMS and ADAS & BDS

An **additional and advanced feature** available with ATOMO -10 MDT is the **embedded hybrid** (it supports up to **8 HD 1080p cameras** and **4 IPC 4K analogic cameras**) **Mobile Network Digital Video Recorder (MNDVR)** with **Artificial Intelligence (AI) – Driver Monitor System (DMS), Advanced Driver Assistance System (ADAS) & Blind Spot Detection System (BDS)**. In particular being able of processing 12 video channels ATOMO -10 supports the full **360° ADAS & BDS** in addition to other security features. Being the MNDVR embedded in ATOMO – 10 it is granted the execution of any assigned task with the **maximum efficiency and redundancy**.

### DMS FEATURES



### ADAS & BDS FEATURES



# ATOMO -10 MDT

## ADDITIONAL FEATURES

### DUAL CPU

#### Primary CPU

The Quadcore or Octa-core, OS Android 9 - 10 and 11, LTE 4G Or LTE 5G allows remarkable flexibility and efficiency in computing power together with reduced power consumption.

#### SECONDARY CPU

The dedicated AITP (Automotive Intensive Task Processor) takes care of the functionalities requested by the automotive market: power management, Safe Shutdown, Wheel Pulses Odometer, Distance and Speed calculation, WakeUp on Ring, Over-the-Air services for software and firmware updates. The AITP is OTA programmable for remote automatic firmware and rates upgrade and it is always powered ON. The processor can switch-ON and OFF the device and the peripherals.

### IDEAL FOR FLEET MANAGEMENT, AVM, TICKETING VALIDATOR, JOB DISPATCHING, SERVICE CERTIFICATION, NAVIGATION.

The device implements the latest technology to match any professional fleet and security application. It is a reliable, professional, compact, flexible, modular and automotive approved Mobile Data Terminal. The 4G LTE or 5G LTE modem allows very reliable communication with back-end servers.

### CUSTOMIZABLE USER INTERFACE

The full HD 10.1" 1KNIT 16:9 TFT display allows to develop versatile and easily accessible applications thanks also to the integrated capacitive touchscreen controller and the 10 Function Keys with LEDs. The Function Keys, implementing the most used operations, allow to enhance the touchscreen life, while the optimal brightness of the display, in any light condition, is guaranteed by the ambient light sensor. The ON/OFF Key is a Smart Power Button, fully programmable and used to perform more than one feature. It can also be disabled or programmed to trigger the Ghost Mode (fake shutdown).

### STEALTH MODE

The Stealth mode is a special operating mode in which the system is working while the display and audio are switched off. This particular feature can be useful in many situations:

- Driver Monitoring: the device implements the "wake up on ring" feature to allow the Operating Central to remotely switch it ON, even in Stealth mode if necessary, to check the vehicle position, gather and/or record audio streams and other data.
- Ghost Mode: the device can be set to move to Stealth mode when switched OFF. This feature is particularly useful if the device is requested to remain always ON (only the display is switched OFF reducing power consumption) or in alarm state.
- Alarm managing: if the device is OFF and alarm button is pressed the system can start in Stealth mode hiding to anybody that it is active. With this special start the device can be programmed to send an alarm message, the GPS position or also screenshots or audio streams to the Operating Central.

### RELIABILITY

The device can withstand glitches, when starting the vehicle engine, and overvoltage up to 32V. It is also immune to ESD and EMC interferences. Thanks to the AITP processor user applications and Android OS can close safely in case of sudden disconnection of the main power.

### INPUTS AND OUTPUTS

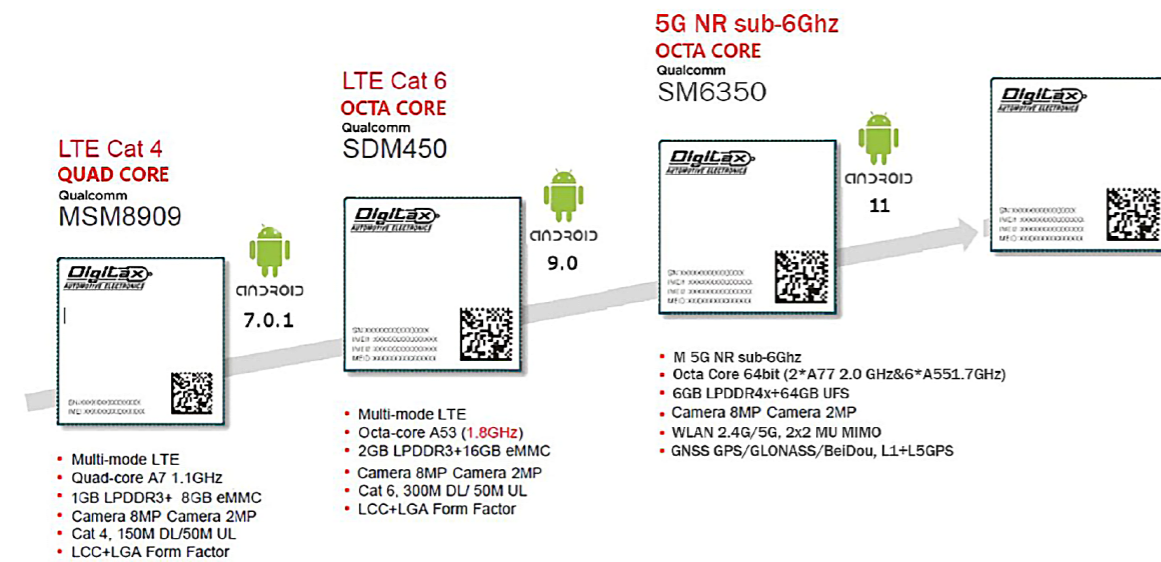
A wide range of I/O channels are available: 3 Hi-Speed Host, 1 USB Client port and a total of 7 RS232 and RS485 serial ports. In particular the special programmable digital I/O allow to bidirectionally interact with external generic devices and equipments.

# ATOMO - 10 MOT

## ADDITIONAL FEATURES

### Available ANDROID PLATFORM configurations

- Qualcomm Quad Core MSM9809 CPU with 4G LTE CAT4 modem and Andorid 7.1.x Operating System
- Qualcomm Octa Core SDM450 CPU with 4G LTE CAT6 modem and Andorid 9.x/10.x Operating System
- Qualcomm Octa Core SM6350 CPU with 5G LTE 5G NR modem and Andorid 11.0x Operating System



# ATOMO - 10 MOT

## QUAD CORE SYSTEM FEATURES

<b>CPUs (Option 1)</b>	Fanless Device with Primary CPU Qualcomm MSM8909 chipset, Quad-core ARM Cortex-A7 32-bit CPU @1.1GHz. Adreno 304 GPU.
<b>GPU</b>	OpenGL ES 3.02, OpenCL3, content security and reduced power consumption.
<b>Secondary Intensive Task CPU Processor (AITP)</b>	Secondary CPU The dedicated AITP (Automotive Intensive Task Processor) supplies the functionalities required by the automotive market like power management, Safe Shutdown, Wheel Pulses Odometer, Distance and Speed calculation, Wake-Up on Ring, Over-the-Air services for software and firmware updates. The AITP is OTA programmable for remote automatic firmware and tariff upgrade and is always powered ON. It can also switch ON and OFF the device and the peripherals.
<b>Ram Memory</b>	+2GB LPDDR3
<b>Storage Solid State Hard Disk Memory</b>	16GB EMMC
<b>External SD</b>	Up to 2T for external storage
<b>Communication Modem 4G</b>	LTE Cat 4 GSM / GPRS Class 12 HSUPA Modem with 300Mbit/s downlink and 50Mbit/s uplink data rates based on LTE network (max).  2 Sim Card slots Always online.
<b>GPS Receiver</b>	Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment.
<b>Antennas</b>	Internal GPS-WiFi-BT-LTE  External GPS-WiFi-BT-LTE Rugged Combo antenna (option).
<b>Multimedia</b>	Audio: MP3, AAC+, eAAC, AMR-NB, -WB, G.711, WMA 9/10 Pro. Video: Encode:30fps 720P (H.264), 30fps WVGA (MPEG-4/VP8). Decoding:30fps 1080P (H.264/MPEG-4/VP8/H.265 DivX4/5/6), 30fps WVGA (H.263).
<b>Connectivity</b>	Wi-Fi Connection 2.4G/5.8G, 802.11 a/b/g/n Bluetooth class 2BT 2.1+EDR/3.0/4.1 LE.
<b>Operating system</b>	Android 7.1.x

# ATOMO - 10 MOT

## OCTA CORE SYSTEM 4G FEATURES

<b>CPUs (Option 2)</b>	Fanless Device with Primary CPU Qualcomm SDM450 chipset, Octacore ARM Cortex-A53 64-bit CPU @1.8GHz. Adreno 506 GPU: OpenGL ES 3.02, OpenCL3, content security, and decreased power consumption
<b>GPU</b>	Qualcomm® Adreno™ 506 graphics processing unit (GPU) with 64-bit addressing
<b>Secondary Intensive Task CPU Processor (AITP)</b>	Secondary CPU The dedicated AITP (Automotive Intensive Task Processor) supplies the functionalities required by the automotive market like power management, Safe Shutdown, Wheel Pulses Odometer, Distance and Speed calculation, Wake-Up on Ring, Over-the-Air services for software and firmware updates. The AITP is OTA programmable for remote automatic firmware and tariff upgrade and is always powered ON. It can also switch ON and OFF the device and the peripherals.
<b>Ram Memory</b>	+2GB LPDDR
<b>Storage Solid State Hard Disk Memory</b>	16GB EMMC
<b>External SD</b>	Up to 256 GB for external storage.
<b>Communication Modem 4G</b>	LTE Cat 6 modem supporting 2 × 20 MHz carrier aggregation, with maximum download speed up to 300 Mbps. Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage. 2 Sim Card slots.
<b>GPS Receiver</b>	Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment.
<b>Antennas</b>	Internal GPS-WiFi-BT-LTE External GPS-WiFi-BT-LTE Rugged Combo antenna (option)
<b>Multimedia</b>	Audio: MP3, AAC+, eAAC, AMR-NB, -WB, G.711, WMA 9/10 Pro. Video: Encode:30fps 720P (H.264), 30fps WVGA (MPEG-4/VP8). Decode:30fps 1080P (H.264/MPEG-4/VP8/H.265 DivX4/5/6), 30fps WVGA (H.263).
<b>Connectivity</b>	Wi-Fi Connection 2.4G/5.8G, 802.11 a/b/g/n Bluetooth class 2 BT 2.1+EDR/3.0/4.1 LE.
<b>Operating system</b>	Android 9.x/10.x

# ATOMO - 10 MOT

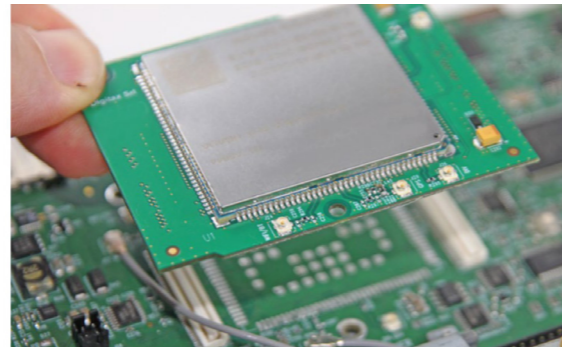
## OCTA CORE SYSTEM 5G FEATURES

<b>CPUs (Option 3)</b>	Fanless Device with Primary CPU Octacore Qualcomm SM6350, Octa-core 64Bit ARM V8, KyroCPU560(2*A77 2.0GHz & 6*A55 1.7GHz)
<b>GPU</b>	Qualcomm® Adreno™ GPU 619 and V66A 1.2GHz+Dual HVX
<b>Secondary Intensive Task CPU Processor (AITP)</b>	Secondary CPU The dedicated AITP (Automotive Intensive Task Processor) supplies the functionalities required by the automotive market like power management, Safe Shutdown, Wheel Pulses Odometer, Distance and Speed calculation, Wake-Up on Ring, Over-the-Air services for software and firmware updates. The AITP is OTA programmable for remote automatic firmware and tariff upgrade and is always powered ON. It can also switch ON and OFF the device and the peripherals.
<b>Ram Memory</b>	+4GB LPDDR4
<b>Storage Solid State Hard Disk Memory</b>	64GB EMMC
<b>External SD</b>	Up to 256 GB for external storage.
<b>Communication Modem 5G</b>	3GPP Rel.15 5G NR, sub-6 GHz 5G NR, 256 QAM uplink/downlink in sub-6 GHz, Rel.15 LTE multimode 2 Sim Card slots.
<b>GPS Receiver</b>	Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment.
<b>Antennas</b>	Internal GPS-WiFi-BT-LTE External GPS-WiFi-BT-LTE Rugged Combo antenna (option)
<b>Multimedia</b>	Support VoLTE Ultra HD voice call and SRVCC/CSFB fallback technology. 24-bit/192kHz HD Music playback.
<b>Connectivity</b>	2.4G/5G, 2x2 MU MIMO, 802.11 a/b/g/n/ac BT 2.1+EDR/3.0/4.1 LE/5.x BLE. Support a maximum of 10 ACL/BEL/SCO links.
<b>Operating system</b>	Android 11.x

## Upgradable Android Platform

Digitax ATOMO – 10 MDT can be equipped, on request, with the full Android Platform On Module. With this option the CPU can be updated to the latest features and O.S, Modem/network, WiFi, Bluetooth releases. This unique feature allows to keep the MDT updated and tuned as per eventual future requirements.

Currently they are available 3 different chip-sets Platform: QUAD Core, OCTA Core and OCTA Core with 5G NR Modem. The next step will be Digitax providing new platforms with AI features, increased computational power, newer and updated OS and peripherals.



## Digitax QUAD-CORE System-on-chip Module

### CPU

- MSM8909, QUALCUMM Quad-core A7, up to 1.1GHz

### Memory

- 1GB LPDDR3 + 8GB eMMC
- Option 2GB LPDDR3 + 16GB eMMC

### OS

- Android 7.1

### WLAN

- 2.4G/5G, 802.11 a/b/g/n
- 150Mbps, STA/AP/P2P

### BT

- BT 2.1 + EDR/3.0/4.1 LE /BT4.2
- Support a maximum of 10 ACL/BEL/SCO links

### GNSS

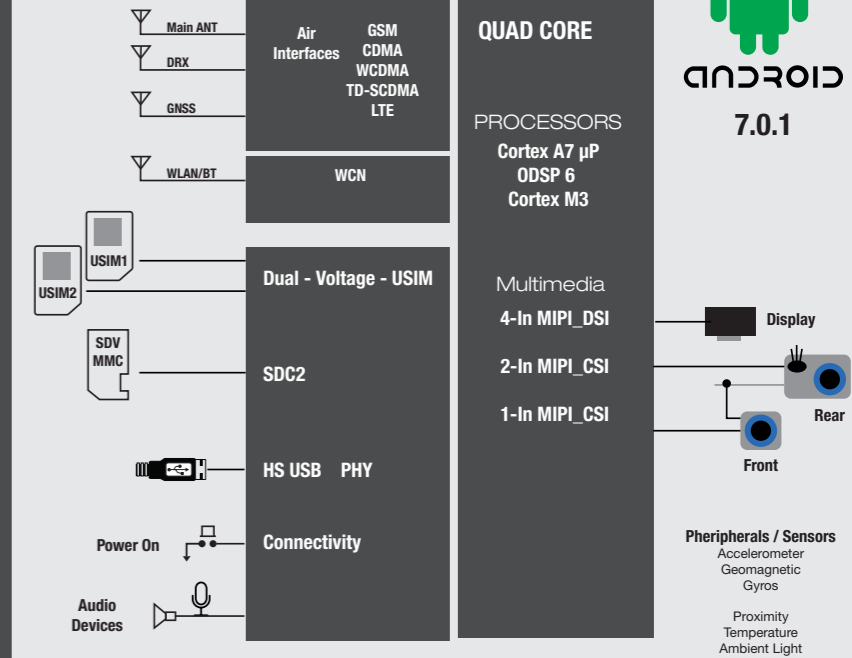
- GPS/BeiDou/GLONASS, or GPS/BeiDou/Galileo

### Modem

- LTE4G - 3GPP Release 10 compliant



## Android



## Digitax QUAD-CORE

- 4-lane MIPI\_DSI, 1.5Gbps/lane, HD (720P) @60fps
- Support MIPI to RGB, MIPI to LVDS and MIPI to HDMI

### Option Camera

- 2 embedded cameras: 1 X 8mp 1 X 2mp 4-lane MIPI\_CSI, 1.5Gbps/lane, 1 ISP, Bayer/YUV format

### Touch panel

- Capacitive-screen, I2C controls

### Audio Analog channels:

- Two inputs: MIC1, MIC2
- Three outputs: speaker, earpiece, headphone

### Video

- Encode: 720P (H.264) @30fps; WVGA (MPEG-4/VP8) @30fps
- Decode: 1080P (H.264/MPEG-4/VP8/H.265/DivX4/5/6) @30fps; WVGA (H.263) @30fps

### USB 2.0 Device

- High Speed, 480Mbps
- Support USB 2.0 OTG, USB OTG+Chargeand USB to Ethernet functions

### (U)SIM

- 2 SIM online, support 1.8/3V (U)SIM cards, with (U)SIM card detection function; DSDS supported



Smart LTE Cat.4 Module  
Max. 150Mbps (DL)  
Max. 50Mbps (UL)

Max. 42Mbps (DL)  
Max. 5.76Mbps (UL)

LCC Package



Android 5.1



Powerful Multimedia  
Function



GPS+GLONASS  
+BeiDou



USB 2.0 High Speed  
Interface



USB Drivers



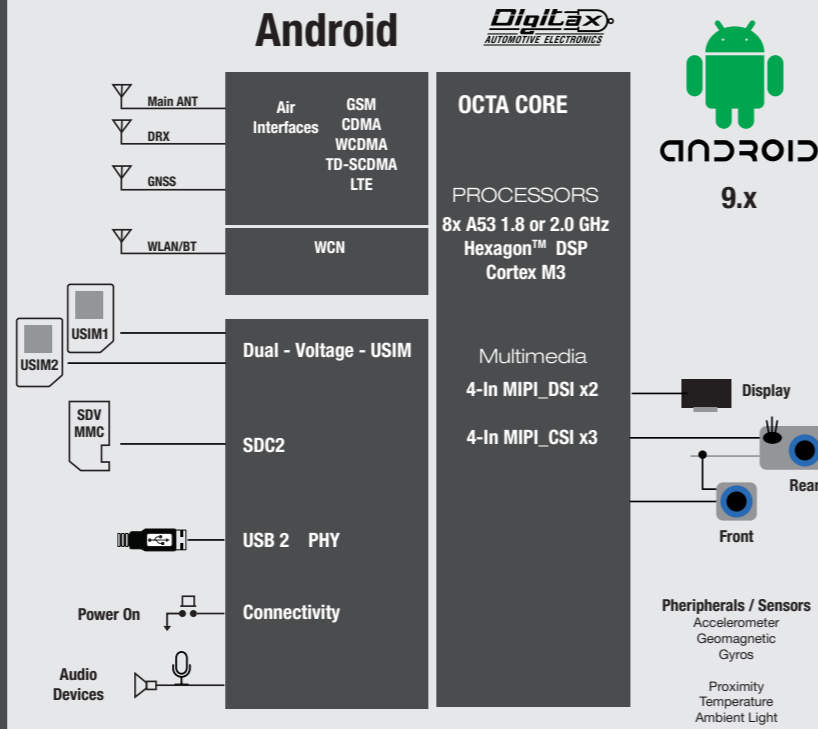
Quectel Enhanced  
AT Commands



## Digitax OCTA-CORE LTE System-on-chip Module

### Digitax OCTA Core LTE Modem

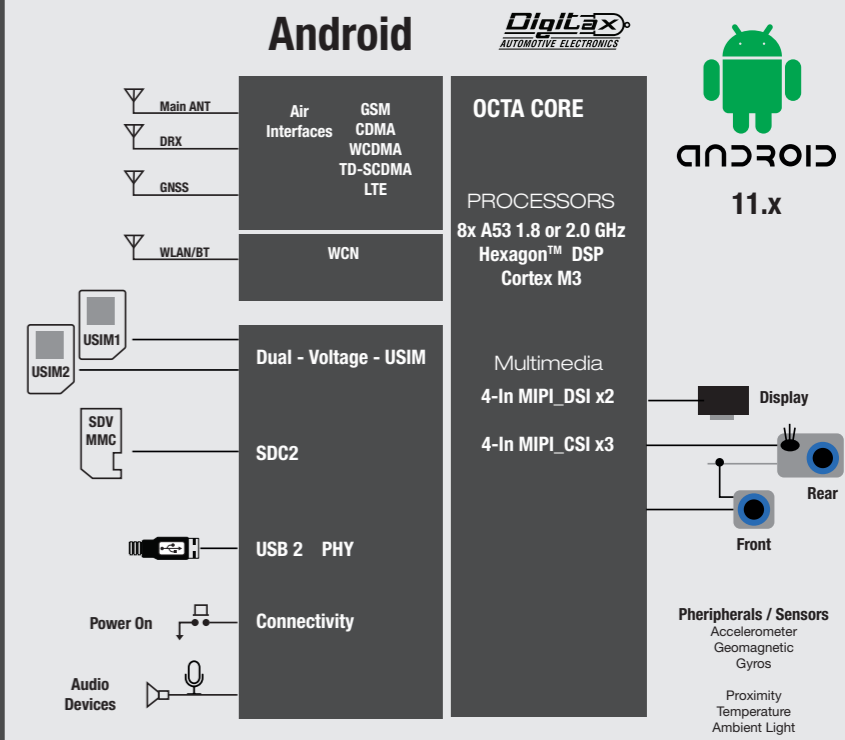
- CPU**
- Octocore: Qualcomm SDM450, Octa-core ARM Cortex-A53 64-bit CPU @1.8GHz
- GPU**
- Qualcomm Adreno™ 506 graphics processing unit (GPU) with 64-bit addressing
- Memory**
- 2GB LPDDR3 + 16GB eMMC
- OS**
- Android 9X
- WLAN**
- 2.4G/5GHz, 802.11 a/b/g/n/ac, 433Mbps, STA/AP/P2P
- BT**
- BT2.1+EDR/ 3.0/ 4.1LE/ 4.2LE
  - Support a maximum of 10 ACL/BEL/SCO links
- GNSS**
- GPS/BeiDou/GLONASS, or GPS/BeiDou/Galileo



## Digitax OCTA-CORE 5G/LTE 5G NR sub-6Ghz System-on-chip Module

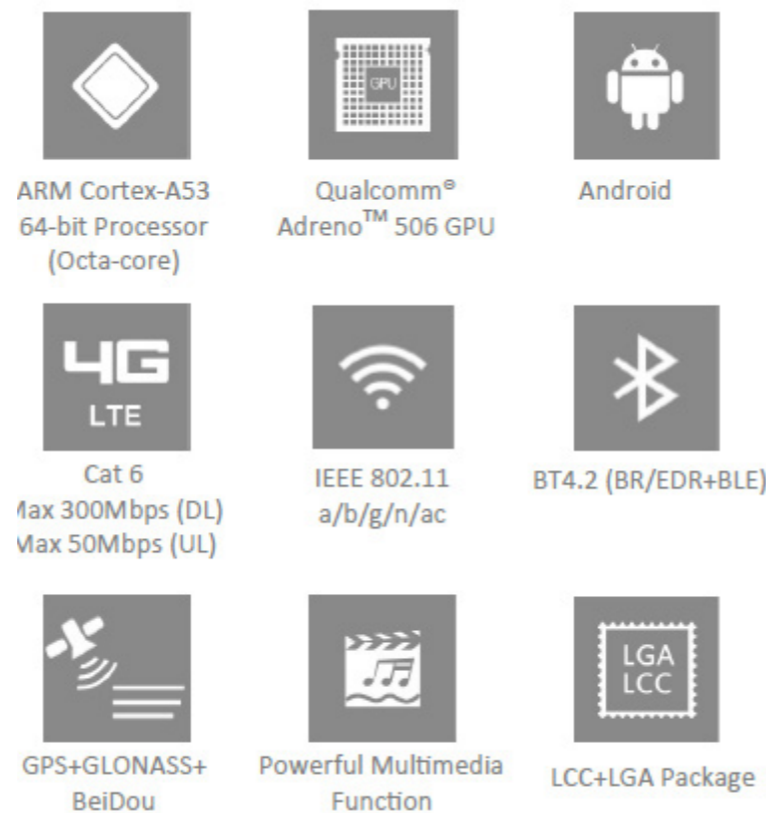
### Digitax OCTA-CORE 5G/LTE 5G NR sub-6Ghz

- CPU**
- Octocore: Qualcomm SM6350, Octa-core 64Bit ARM V8, Kryo CPU560(2\*A77 2.0GHz & 6\*A55 1.7GHz)
- GPU**
- Qualcomm Adreno™ GPU 619 and V66A 1.2GHz+Dual HVX
- Memory**
- 4GB LPDDR4 + 64GB eMMC
- OS**
- Android 11X
- WLAN**
- 2.4G/5G, 2x2 MU MIMO, 802.11 a/b/g/n/ac
- BT**
- BT2.1+EDR/3.0/4.1 LE/5.xBLE
  - Support a maximum of 10 ACL/BEL/SCO links
- GNSS**
- GPS/GLONASS/BeiDou, L1+L5GPS
  - Support dual LCDs for independent display: dual 4-lane MIPI\_DSI; WUXGA(1920\*1200) @60fps
  - Wi-Fi display: 1080P 30fps (UBWC)



## Digitax OCTA Core LTE

- Modem**
- LTE4G - Partial 3GPP Release 12 compliant
- LCM**
- Support dual LCDs for independent display: dual 4-lane MIPI\_DSI; WUXGA(1920\*1200) @60fps
  - Wi-Fi display: 1080P 30fps (UBWC)
- Camera**
- 3 groups of 4-lane MIPI\_CSI, up to 2.1Gbps per lane
  - Support three cameras (4-lane + 4-lane + 4-lane) or four cameras (4-lane + 4-lane + 2-lane + 1-lane)
- Touch panel**
- 2, Capacitive-screen, I2C controls
- Audio Analog channels:**
- Two inputs: MIC1, MIC2
  - Three outputs: speaker, earpiece, headphone
- Video**
- Video encoding and decoding: up to 1080P @60fps
  - Video encoding and decoding: up to 4K at 30fps
- USB**
- USB 2.0 Compliant, Type-C, USB OTG + Charge
- (U)SIM**
- 2, support 1.8/3V (U)SIM cards, with (U)SIM card detection function; DSDS supported



## Digitax OCTA-CORE 5G/LTE 5G NR sub-6Ghz

- Modem**
- 3GPP Rel.15 5G NR, sub-6 GHz 5G NR, 256 QAM up-link/downlink in sub-6 GHz, Rel.15 LTE multimode
- LCM**
- FHD+ 10 bit, 60/90/120 Hz support, One 4-lane DSI, D-PHY 1.2, C-PHY 1.0 DisplayPort support over USB Type-C
- Camera**
- 3 groups of 4-lane MIPI\_CSI, up to 2.1Gbps per lane
  - Support three cameras (4-lane + 4-lane + 4-lane) or four cameras (4-lane + 4-lane + 2-lane + 1-lane)
- Touch panel**
- 2, Capacitive-screen, I2C controls
- Audio Analog channels:**
- Two inputs: MIC1, MIC2
  - Three outputs: speaker, earpiece, headphone
- Video**
- Support VoLTE Ultra HD voice call and SRVCC/CSFB fallback technology
  - 24-bit/192kHz HD Music playback
  - Video codec 4K30 decode+1080p30 encode
- USB**
- USB 2.0 Compliant, Type-C, USB OTG + Charge
- (U)SIM**
- 2, support 1.8/3V (U)SIM cards, with (U)SIM card detection function; DSDS supported





# Module Memory

Module Memory size could be customizable. Currently these are available options:

Module	Memory (LPDDR3 + eMMC)					
	1GB + 8GB	2GB + 16GB	3GB + 32GB	4GB + 32GB	6GB + 64GB	8GB + 128GB
QUAD-CORE	Y	Y	N	N	N	N
OCTA-CORE	N	Y	Option	Option	Option	
OCTA-CORE 5G	N	N	N	N	Y	Option

## Modules CPU comparison

Module	CPUs					
	Application	Modem	RPM	GPU	Audio DSP	Video
QUAD-CORE	Cortex-A 7. Quad core 1.1 GHz. 32bit, 512 KB L2 cache	QDSP6V5, 691 .2 MHz. 768 kB L2 caches	Cortex-M3	Adreno 304@409.6 MHz	Share with modem	Venus 310 266MHz
OCTA-CORE	Cortex-A53, Octa core, 64bit 4X1 .8GHz, 512 KB L2 cache 4X1 .8GHz, 512 KB L2 cache	Hexagon DSP V56850 MHz 768 kB l2 caches	Cortex-M3	Adreno 506@600 MHz, 64bit	Hexagon DSP V56 850 MHz 768 kB l2 caches	Venus333
OCTA-CORE 5G	CPU adopts 8nm FinFET with 64bit ARM VS core, Kryo CPU 560 (2 * A77 2.0 GHz&6 * A551.7 GHz) with Adreno GPU 619 and V66A 1.2GHz+Dual HVX	Support 5G NR sub-6GHz, DL 4x4 MIMO SA/NSA mode and UL 2x2 MIMOSA mode	Cortex-M3	Adreno GPU 619 and V66A 1.2GHz+ Dual HVX	24-bit/192 kHz HD Music playback	Support 4K @30fps video recording and playback

## Video

Module	VIDEO		
	HW performance	HW codec	SW codec
QUAD-CORE	Decoder: 1080P@30fps, 20 bps Encoder: 720P@30fps, 14 bps Encoder HFR: 800x480@60fps, 4Mbps Maximum 244800 macro block/s FWVGA@30fps de+FWVGA@30fps en	Decoder: H.264 BP/MP/HP, VP8, HEVC Main Encoder: H.264 BP/MP	Decoder: MPEG-4 SP/ASP, H263 PO, DivX 4.x, 5.x, 6.x, XVID Encoder: PEG-4 SP, H.263 PO
OCTA-CORE	Decoder: 1080P@60fps, 60 bps Encoder: 1080P@60fps, 60 bps Encoder HFR: 720P@120ps, 60 bps Maximum 972000 macro block/s 1080P@60fps de+1080P@30fps en	Decoder: HEVC/H.264NC-1/ PEG-4/DivX/H2631 PEG-2NP8NP9 Encoder: HEVC/H.264/MPEG-4/H263NP8	
OCTA-CORE 5G	4K30 decode+1080p30 encode	Video codec codec:Decode 4K@30fps 10 10-bitbit: Encode 4K@30fps 8 8-bitbit: 4K@30 playback+1080P@30 encode	

## Modem

Module	Modem							
	3GPP Rel	GERAN	WCDMA	TDSCDMA	COMA	1xEV-DO	LTE-FDD	LTE-TDD
QUAD-CORE	Full conform R10 Partly support R11	GSM/GPRS/EDGE EDGE Multi Slot Class 33 DL-236 Kbps UL-59.2 Kbps	HSDPA-CAT24 HSUPA-CAT6 DL-42.2 Mbps UL -5. 76 Mbps	HSDPA-Cat 24 DL-307.2 DL-4.2 Mbps UL-2.2 Mbps	1 x-Advanced DL-307.2 Kbps UL-307.2 Kbps	DL-3.1 Mbps UL-1.8 Mbps	Cat4 DL-150 Mbps UL-50 Mbps	Cat4 DL-130 Mbps UL-35 Mbps
OCTA-CORE	Full conform R10 Partly support R12	GSM/GPRS/EDGE EDGE Multi Slot Class 33 DL-236 Kbps UL-59.2 Kbps	DC-HSD-PACAT29 DC- HSUPACAT8 DL-84 Mbps UL-11 Mbps	HSDPA-Cat 24 HSUPA-Cat6 DL-4.2 Mbps UL-2.2 Mbps	1x-Advanced DL-307.2 Kbps UL-307.2 Kbps	DL-3.1 Mbps UL-1.8 Mbps	Cat6 DL-300 Mbps UL-50 Mbps	Cat6 DL-265 Mbps UL-35 Mbps
OCTA-CORE 5G	3GPP Rel.15 5G NR	Rel.15 LTE multimode modem						

## WI-FI

Module	WIFI				
	WIFI Chipset	Band & Protocol	2*2 MIMO	WIFI Display	Mode
QUAD-CORE	WCN36608	2.4G&5G 802. 11 a/b/g/n, 150Mbps	N	N	STA I AP(32) & Wifi direct Wifi probe
OCTA-CORE	WCN3680	2.4G&5G 802. 11 a/b/g/n/ac, 433Mbps	N	FHD(1920x1080)@30fps Both host&device	STA I AP(32) & Wifi direct Wifi probe
OCTA-CORE 5G	WCN3680B	2.4G/5G, 2x2 MU MIMO, 802.11 a/b/g/n/ac axready	Y		

## Bluetooth

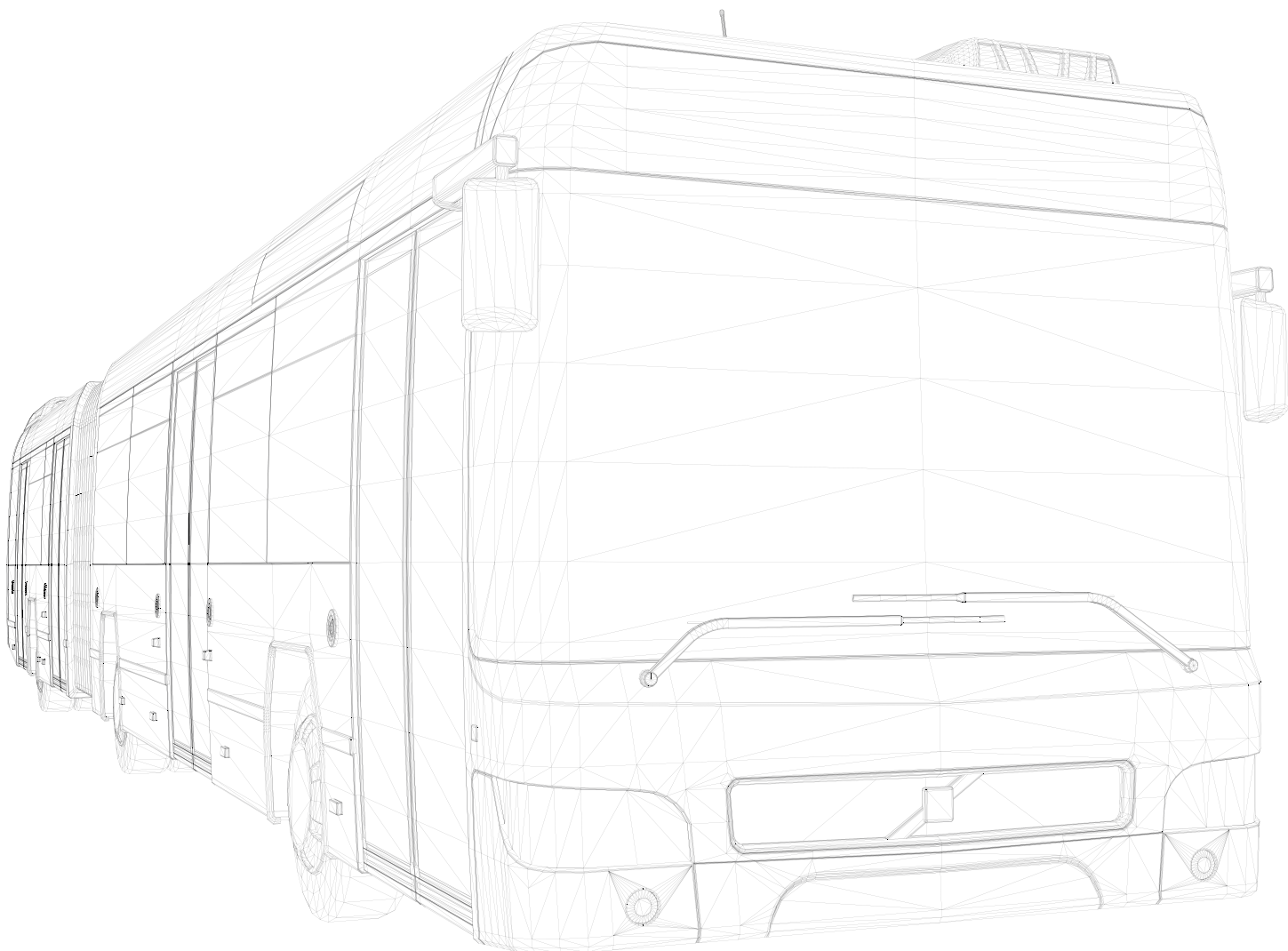
Module	BT		
	BT Chipset	Protocol	Profiles
QUAD-CORE	WCN 3660B	BT3.x BT4.2/LE(Android 7)	FTP 1.1, HDP 1.0 , HID 1.0 - Hos, OPP 1.1. PAN 1.0, SAP 1.1 . AVRCP 1.3 , BLE GATT Client/Server, A2DP 1.2 - SRC/SNK HFP 1.6 - AG/HS, MAP 1.0 - MSE/MCE PBAP 1.0 - PSE/PCE, AVRCP 1.5 - Target, DUN 1.1
OCTA-CORE	WCN 3680	BT3.x BT4.2/LE	HID 1.0 - Client, HOGP 1.0, OPP 1.2, Dual-HFP, OBEX over L2CAP, AVRCP 1.5- Controller. BR/EDR Secure Connections, Dual Mode Topology, BLE Peripheral Mode, Multi-HFP HFP 1.7, Dual A2DP Handoff
OCTA-CORE 5G	4K30 decode+1080p30 encode	BT2.1+EDR/3.0/4.1 LE/5.x BLE	

## GNSS

Module	Memory (LPDDR3 + eMMC)						Note
	GPS	Beidou	GLONASS	Galileo	QZSS	SBAS	
QUAD-CORE	Y	Y	Y	Y	N	N	►GPS Beidou and GLONASS
OCTA-CORE	Y	Y	Y	Y	N	N	or ►GPS Beidou and Galileo
OCTA-CORE 5G	Y	Y	Y	Y	N	N	

Features are subject to change without notice





### Digitax Italy Headquarter

Via dell'Industria 16 - 62017 Porto Recanati (MC) - ITALY

Phone +39 071 7590984 r.a. - Fax +39 071 9797405 / E-mail [info@digitax.com](mailto:info@digitax.com) - Web [www.digitax.com](http://www.digitax.com)

#### Digitax España

C/Tomás Bretón, 7  
28045 – Madrid  
SPAIN  
Phone +34 902366292  
Fax +34 915271562  
Web: [www.digitax-es.com](http://www.digitax-es.com)  
E-mail: [info@digitax-es.com](mailto:info@digitax-es.com)

#### Digitax Electronics U.K.

Smokehouse, 31  
Tanners Bank North Shields  
Tyne & Wear NE 30 1 JH  
ENGLAND  
Phone +44 (0191) 296 1294  
Fax +44 (0191) 257 8438  
Web: [www.digitax.net](http://www.digitax.net)  
E-mail: [digitaxuk@aol.com](mailto:digitaxuk@aol.com)

#### Digitax Deutschland

Taxitech Handelsges. mbh  
Sommerkamp 31a - 22335  
Hamburg  
GERMANY  
Phone +49 40 555 05540  
Fax +49 40 555 05530  
Web: [www.digitax-de.com](http://www.digitax-de.com)  
E-mail: [digitax@taxitech.de](mailto:digitax@taxitech.de)

#### Digitax Nederland B.V.

Postbus 84112  
3009 CC ROTTERDAM  
HOLLAND  
Phone +31 10 4512121  
Fax : +31 10 4500453  
E-mail: [h.wittenberg@planet.nl](mailto:h.wittenberg@planet.nl)  
E-mail: [info@digitax.nu](mailto:info@digitax.nu)