

X-One

ANDROID 7 9 12 14 16





X-One Android is an all-in-one Mobile Data Terminal (MDT) designed to deliver maximum reliability and high performance in industrial environments, with a specific focus on vehicle management and safety. Engineered for demanding sectors such as transportation, logistics, and fleet operations, X-One Android combines processing power with rugged construction, ensuring full compliance with automotive industry standards.

Its compact, reinforced design makes it ideal for seamless vehicle integration, while industrial-grade materials and sealed connectors provide protection against dust, moisture, and shocks—even in harsh environments.

Equipped with a built-in 4G LTE modem, X-One Android ensures fast, reliable mobile communications—essential for real-time data access and continuous monitoring. The integrated multi-constellation positioning system (GPS/GLONASS/BeiDou) provides accurate and stable location tracking, even in dense urban areas or low-signal environments.

X-One Android features short-range wireless communication, a customizable user interface, and a wide range of I/O ports for connecting external devices and peripherals. These features make it highly adaptable and suitable for various operational needs.

For enhanced flexibility and future upgrades, the optional Chip On Module allows for easy replacement of the chipset and operating system—extending the device’s lifecycle and simplifying maintenance.

Available Configurations

X-One Android is available in four hardware/software configurations to meet a range of performance and compatibility requirements:

- QuadCore – Android 7.1
- OctaCore – Android 9-10
- OctaCore – Android 14-16



- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> CAN BUS INTERFACE | <input checked="" type="checkbox"/> SYSTEM ON CHIP MODULE | <input checked="" type="checkbox"/> BT 2.1 + EDR 3.0/4.1 LE |
| <input checked="" type="checkbox"/> GLONASS/GPS/BeiDou | <input checked="" type="checkbox"/> CAT 4 LTE MODULE | <input checked="" type="checkbox"/> ANDROID 7.1/9.1/12/14 |
| <input checked="" type="checkbox"/> USB INTERFACE | <input checked="" type="checkbox"/> SERIAL PORT INTERFACE | <input checked="" type="checkbox"/> POWERFUL MULTIMEDIA FUNCTION |
| <input checked="" type="checkbox"/> DIGITAX SDK | <input checked="" type="checkbox"/> WLAN 2.4G 802.11B/G/N | <input checked="" type="checkbox"/> DEDICATED CPU FOR AUTOMOTIVE INTENSIVE TASK PROCESSOR |

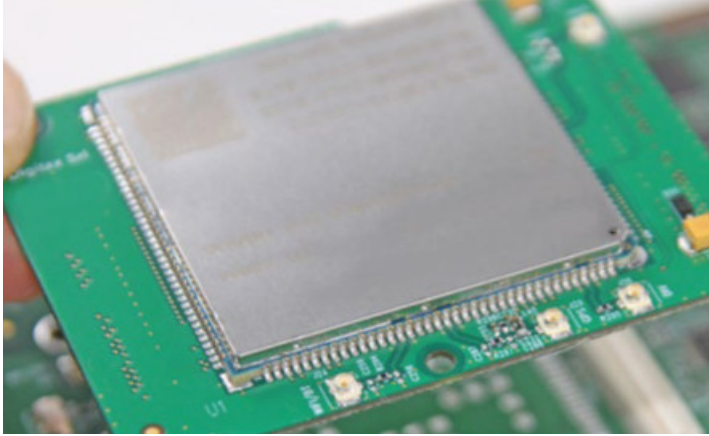
Direct Interfaces

Digitax **X-One Android** is a Mobile Data Terminal that is capable of managing a wide range of direct interfaces from the vehicle, making it a highly versatile and powerful device. It supports numerous functionalities, providing seamless integration with various vehicle systems. X-One Android as advanced machine for professional application bring some important new features that are recently added to the functionality of the device.

Some of its key features are highlighted below as for example: **eSim Technology**, **Dead Reckoning Technology**, **Driver Behaviour Merit System** and his direct interfaced with **PIM Monitor headrest Displays**.



Upgradable Android Platform



Digitax x-One Android device as option could be required with the “system on chip module”. This option permits to upgrade internal CPU to a new one with different features, updated O.S, and characteristics. This feature permits you to keep the device update tune the device your needs and requirements.

Interchangeable current and future Android platforms (SOC) by Module Replacement

THE SOC PLATFORM INCLUDE:

- **Android CPU**
- **Android RAM & eMMC Memories**
- **Modem**
- **WiFi**
- **Android GPU**
- **Android OS**
- **GPS**
- **BLUETOOTH**

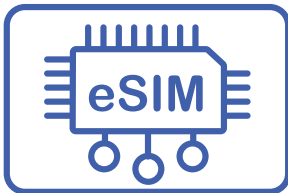


New Features

Digitax is committed to the continuous development and evolution of its product range, with a strong focus on innovation, technological advancement, and customer satisfaction. The company closely follows the latest industry standards and emerging technologies to ensure that its solutions remain at the forefront of the market.

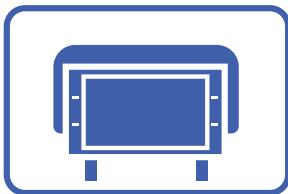
Thanks to its deep expertise and consolidated know-how, Digitax is able to anticipate market trends and proactively integrate new features that respond to the real needs of professionals in the field. This approach allows the company to offer products that are not only reliable and robust, but also smart, flexible, and ready to adapt to the challenges of tomorrow.

Below is an overview of the latest updates and improvements integrated into the X-One Android environment:



eSIM technology integrated

eSIM is the global specification that enables remote SIM provisioning; end-users can change mobile network operators without the need to physically swap SIMs via OTA system from the device.



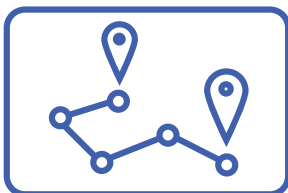
Headrest monitor “PIM” (Public Information Media)

X-One Android is working with integrated EMV POS (point of sale) system for autonomous passenger credit card payment. The PIMs monitor are installed on the headrest of the vehicle allowing the customer to interact with the system, making payments, checking news, weather conditions and more.



The Driver Behaviour Merit System

On the X-One Android is available a system that monitors and evaluates driving habits, encouraging safer, more efficient, and professional driver performance. The data is sent to a data server that track the driver behaviour history and help companies improve the quality and the cost of their fleets.



Dead Reckoning technology

Dead reckoning is a navigational system where an estimated position is determined based on a previously known location, speed, course, and time. That improves navigation accuracy by continuously calculating position based on speed, direction, and elapsed time. It ensures stable and reliable positioning, especially in areas with poor GPS signal, enhancing overall system performance in challenging environments.

Dual CPU

MAIN CPUs :



QUAD CORE - 20

Android 7.1
CPU ARM Cortex-A7
Quadcore 4 x 1.8 Ghz
GPU Adreno 304
Base 2Gb LPDR + 16Gb eMMC
Multi-constellation GNSS receiver
LTE-4G
Bluetooth 4.0
WiFi 2.4G/5.0G



OCTACORE - 600

Android 9-10
CPU ARM Cortex-A53 64-bit Processor
Octacore 8 X 2 Ghz
GPU Adreno 506
2GB + 8GB uMCP(LPDDR4x) (default)
32GB + 3GB uMCP(LPDDR4x) (option)
Multi-constellation GNSS receiver
4G LTE Cat 6
Bluetooth 4.2
WiFi 2.4G/5.0G



OCTACORE - 530

Android 14
CPU 2* A75@2.0GHz
OCTACORE +6*A55@1.8GHz
GPU Mali G57 @750MHz
2GB + 8GB uMCP(LPDDR4x) (default)
32GB + 3GB uMCP(LPDDR4x) (option)
Multi-constellation GNSS receiver
4G LTE Cat 4
Bluetooth 5.0
WiFi 2.4G/5.0G



OCTACORE 927

Android 14/16
CPU 64bit ARM
OCTACORE (4*A73 2.4GHz+4*A53 1.9GHz)
GPU Adreno™ 610
64GB + 4GB uMCP(LPDDR4x) (default)
32GB + 3GB uMCP(LPDDR4x) (option)
Multi-constellation GNSS receiver
4G LTE CAT.4
Bluetooth 5.1
WIFI 802.11 ax ready



OCTACORE 700 (5G)

Android 13-16
CPU Kryo™ 670 CPU
8 core Kryo™ CPU
(2* GoldA78 2.4GHz + 6*
SilverA55 2.0GHz)
GPU Adreno 613 - 812Ghz
32Gb + 6Gb
5G - mmWave/Sub-6 GHz
Multi-constellation GNSS receiver
Bluetooth 5.2
WiFi 6E



SECONDARY CPU AITP (for all versions) :

AITP (Automotive Intensive Task Processor) dedicated to the necessary functionalities in the automotive field, 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 turn-ON and OFF the Device and its peripherals.

Ideal for Fleet Management

The Device represents the state-of-the-art device for job dispatching, security and fleets management, an ALL-IN-ONE industrial grade and automotive compliant, powerful and compact solution.

Its 4G LTE modem allows very reliable communication with operating headquarters. The vehicle is located by the high performance GPS/GLONASS/BeiDo receiver.

Customizable User Interface

The 7 inches 16:9 clear readable TFT Displays with HD 1024x800 @60fp resolution allow to develop versatile and high accessible applications, thanks also to the integrated TouchScreen controller, and to the 6 keys with LEDs available.

Hardware Keys avoid consumption and damage of Touch Screen for heavily used operations.

to choose The ambient light sensor allows an optimal brightness of the display in any environmental light.

The power key is a Smart Power Button, completely programmable and used to perform several important tasks. Can be also disabled or programmed to trigger Ghost Mode (fake shutdown).

Stealth Mode

Stealth mode is a special operating mode in which the system is working but the display and audio is OFF.

This feature can be useful in several situations:

Driver Control: System has also the wake up on ring feature, so at the central it is possible to remotely turn-ON the device (also in stealth mode so nobody can see that it is starting) in order to check vehicle position, internal audio listening and other data.

Ghost Mode: It is possible to set the device so that after pressing the shut down but on the system goes on stealth mode instead of turning OFF. This feature is useful if you want the device to remain always ON (it turns OFF only the display, reducing power consumption) or in an alarm situation.

Alarm managing: If system is OFF and alarm but on is pressed the system can be started in stealth mode, so nobody can see that the system starts. On this special start the system can be programmed for example to send an alarm message to the central, GPS position or also screenshots or audio

High Availability

The Device has been designed for professional automotive application, it is fully automotive certified, can withstand glitches at car engine start, over voltage up to 32V and immunity to ESD and EMC interferences

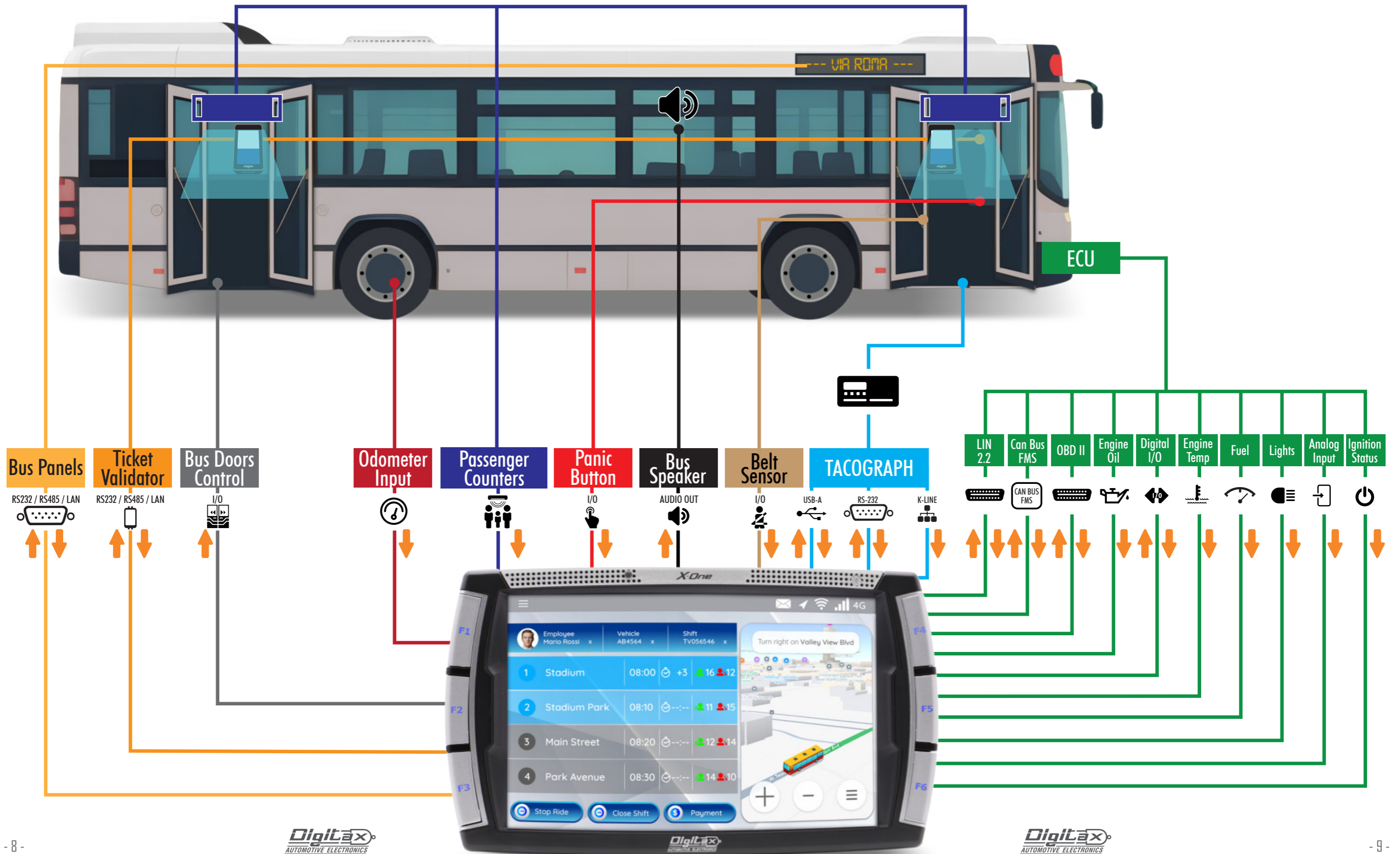
The AITP processor gives time to user applications and Android O.S. to close gracefully and safely in case of sudden disconnection of the Main Power.

Input and Outputs

The Device supplies a wide range of communication channels with the external environment: Hi-Speed USB 2.0 Host, one USB Device and up to 7 RS232 and RS485 Serial Ports.

The special programmable digital inputs and outputs allow to control devices and read signals coming from generic external equipment's.

Available Configurations



Main Features

| | |
|---|---|
| Display | Viewing area 7" diagonal Aspect Ratio 16:9 WVGA 1024x800 Resolution Colour TFT LED Display Display clearly viewable with 500 cd/m2 Ambient Light Sensor with Automatic Regulation |
| Touchscreen | Capacitive Touch screen Extended Temperature Range |
| OPTION 1: CPU (QuadCORE 20) | Android 7.1, ARM Cortex-A7 CPU, Quadcore 4 x 1.8 Ghz, GPU Adreno 304, Base 2Gb LPDR + 16Gb eMMC, Multi-constellation GNSS receiver, LTE-4G, Bluetooth 4.0, WiFi 2.4G/5.0G |
| OPTION 2: CPU (OctaCORE 600) | Android 9-10, ARM Cortex-A53 64-bit Processor, Octacore 8 X 2 Ghz GPU Adreno 506, 2GB + 8GB uMCP(LPDDR4x) (default), 32GB + 3GB uMCP(LPDDR4x) (option), Multi-constellation GNSS receiver, 4G LTE Cat 6, Bluetooth 4.2, WiFi 2.4G/5.0G |
| OPTION 3: CPU (OctaCORE 530) | Android 14, OCTACORE 2* A75@2.0GHz +6*A55@1.8GHz GPU Mali G57 @750MHz, 2GB + 8GB uMCP(LPDDR4x) (default), 32GB + 3GB uMCP(LPDDR4x) (option), Multi-constellation GNSS receiver, 4G LTE Cat 4 Bluetooth 5.0, WiFi 2.4G/5.0G |
| OPTION 4: CPU (OctaCORE 927) | Android 14/16, CPU 64bit ARM, (4*A73 2.4GHz+4*A53 1.9GHz) GPU Adreno™ 610, 64GB + 4GB uMCP(LPDDR4x) (default), 32GB + 3GB uMCP(LPDDR4x) (option), Multi-constellation GNSS receiver, 4G LTE CAT.4, Bluetooth 5.1, WIFI 802.11 ax ready |
| OPTION 5: CPU (OctaCORE 700 5G) | Android 13-16 CPU Kryo™ 670 CPU 8 core Kryo™ CPU (2* GoldA78 2.4GHz + 6* SilverA55 2.0GHz) GPU Adreno 613 - 812Ghz 32Gb + 6Gb 5G - mmWave/Sub-6 GHz Multi-constellation GNSS receiver + Bluetooth 5.2 + WiFi 6E |
| Secondary Intensive Task CPU Processor (AITP) | 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. |
| Antennas | Internal WiFi-BT-LTE / External GPS-WiFi-BT-LTE Rugged Combo (option) |
| USB Ports | 2 USB 2.0 Host (with USB Support for Mouse and Keyboard) Hi-Speed 1 USB 2.0 / OTG Host/Device |
| Serial Ports | 1 External Full Modem RS232 Port. + 2 External TX/RX RS232 / RS485 Port + 4 External RS232 Serial Ports (option) |
| I/O ports connection | 3 Digital Inputs. 3 + 5 Power Output Ports. Dedicated Ignition input. 2 Analog Ports input. External Speakers output. External Microphone input. |
| Can Bus | Can Bus interface OBD-II OBD2-FMS-SAJ1939 LIN 2.2 |
| Alarm and Security | Panic Button input / Emergency Switch input Stealth Mode Controller (system ON display, audio and lightings off) |
| Hardware Keys | 6 Lighted and Software programmable Hardware Buttons |

| | |
|--------------------------------|--|
| Power on Key | 1 Smart Power On/Off button + 6 Function Keys |
| Multimedia | <p>Audio: MP3, AAC+, eAAC, AMR-NB, -WB, G.711, WMA 9/10 Pro</p> <p>Video Encode: 30fps 720P (H.264), 30fps WVGA (MPEG-4/VP8)</p> <p>Decode: 30fps 1080P (H.264/MPEG-4/VP8/H.265 DivX4/5/6), 30fps WVGA (H.263)</p> <p>Internal and external Speaker and Microphone</p> <p>Supports wave speaker volume control</p> |
| API Provided | <p>Soft/Hard Reset</p> <p>Soft Reset available through HW switch</p> <p>Soft Reset available through API calls</p> |
| Connectivity | <p>Ethernet: 10/100 Mbps LAN Controller</p> <p>Wi-Fi Connection 2.4G/5.8G, 802.11 a/b/g/n</p> <p>Bluetooth class 2 BT2.1+EDR/3.0/4.1 LE</p> |
| Operating System | <p>Android 7.1 (QuadCORE Version)</p> <p>Android 9/14/16 (OctaCORE Version)</p> <p>Development Tools</p> <p>Adb/Android Studio IDE with USB debugging support</p> <p>SDK for Android O.S.</p> <p>Sample code for SDK</p> <p>Digitax Framework (Digitax Libraries): GPS, Odometer, Hardware Keys, WatchDog, OTA, Stealth Mode Controller, Logs, And Restore, Light Dimmer, Hardware Identification, Alarm, Card Reader and Windows</p> <p>Status</p> <p>Serial port driver and test tools</p> <p>Digital I/O driver</p> |
| System Diagnostic Tools | <p>On Field Test (OFT) OnBoard Diagnostic Utilities included, with Customizable CheckList to make tests of GPS Fix, GPS Antenna, GPRS Connectivity and Base Station Signal Quality, Odometer, Ignition, Panic Button, TouchScreen calibration, Hardware Keys, Ambient Light Sensor, Device version, OS Version, AITP Version, UPS and Battery Status, Roof Light, Navigation Software</p> <p>All On Field Tests and enrolling features can be used during first installation and swap of devices</p> |
| OS Image Loader | <p>Over The Air (OTA) OS image loader or microSDHC Card Image Loader</p> <p>Professional OTA (Over The Air) CLIENT allows the update of the whole Operating System and all the CPUs Firmware (option).</p> |
| System Update Fleet Management | <p>Professional OTA (Over The Air) SERVER with vehicles enrolling, group management and selective update, remote debugging and logging. Web based user interface (option)</p> |
| Power Supply | 8 - 32 V with Surge Protector |
| Battery | Internal Battery Package (option) |
| Mounting | All the External Connectors, Accessible slots (such as SIM Card, Micro SDHC, USB, etc.) and Screws are Mechanically Sealed |
| Operating Temperature | -20°C to 80°C |
| Humidity | Humidity up to 95% non-condensing. |
| Vibration | Vibration Sine wave, 10 ~ 500 ~ 10Hz, 1.5G, 0.37oct/min 3 axis, 1hour/axis. |
| Dimension & Weight | 204 mm x 120 mm x 35 mm (WxHxD)- 545g |

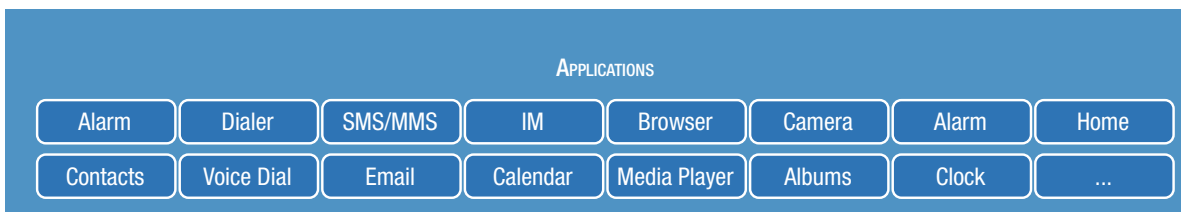
Software Customization

Digitax R&D Team can customize and keep updated every System software module.

Together with the technical support, Digitax also provides Libraries, Code Samples and anything is required to let the customers to develop customized and proprietary applications by their own.

Digitax will provide technical support

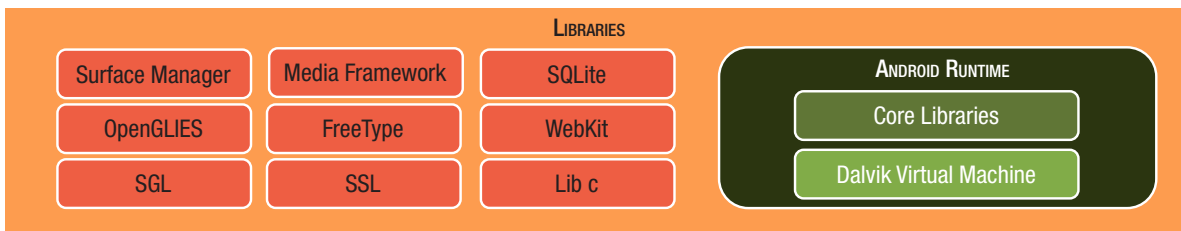
APP LAYER



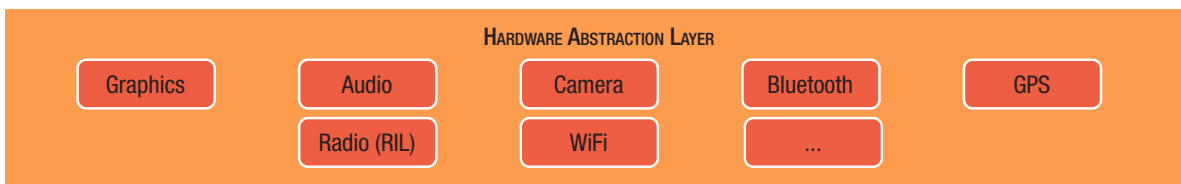
JAVA LAYER



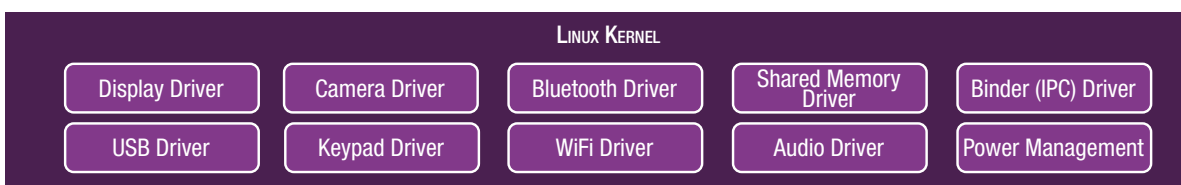
NATIVE LAYER



HAL



LINUX KERNEL



Product Views

X-One
ANDROID



Front Side View



Back Side View



Right Side View



Left Side View





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