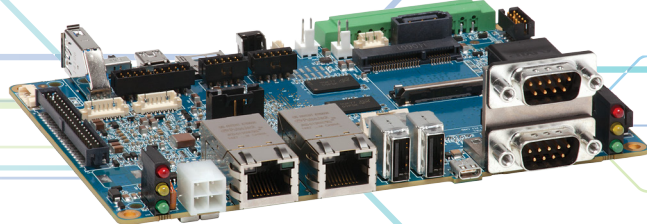


## CPU-351-13

- IoT and M2M Ready
- Multicore i.MX6, up to 1.2GHz
- Protected Wide Range Power In
- CANbus
- Camera Input
- On-board Accelerometer
- WiFi, Bluetooth, Zigbee
- Cellular and GPS Options
- Linux and WEC 7
- -40° to +85°C Operation



### FEATURES

**Low Power, up to 4 cores** – Based on the highly integrated Freescale i.MX6 SOC, with 1 to 4 cores up to 1.2GHz

**Connected** – Global cellular options, WiFi, Zigbee, Bluetooth 4.0 (with LE), dual Gb Ethernet

**Features for transportation** – 50ch GPS, CANBus, 3-axis accelerometer, protected wide range power in

**Graphic capabilities** – Two video ports: LVDS and HDMI with integrated 4/5 wire resistive touch controller

**Power management** – Multi-chemistry battery charger, smart power monitor

**Rugged** – Extended operating temperature (-40° to +85°C)

**IoT / M2M ready** – Supports Eurotech's EDC, the end-to-end cloud solution that offers open M2M protocols, cloud-based databases, brokers, and easy to use REST APIs

The CPU-351-13 is an iMX.6 Single Board Computer board that delivers a large number of interfaces and peripherals while keeping the overall power consumption at a low 4W for typical applications.

Designed to be employed in a wide range of industrial and transportation applications, the CPU-351-13 provides key features such as 6-36VDC protected power in, CANBus with optional J1939(CAN)/J1979(OBDII)/J1708 support and extended operating temperature.

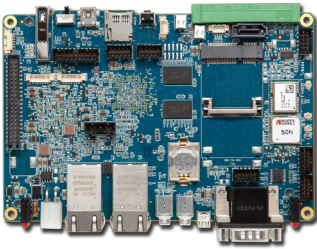
With an on-board multi-chemistry charger, the CPU-351-13 simplifies the design of battery powered applications; an additional benefit comes from the integrated Smart Power Monitor, which can be used to keep the board within a user-defined power profile.

Support for cellular communications is available both on board and through the external Eurotech ReliaCELL adapter family, which provides pre-certified, worldwide coverage.

The CPU-351-13 accelerates the development and deployment of IoT/M2M applications: it supports EDC, Eurotech's cloud for embedded devices. EDC is a complete offering consisting of open M2M protocols, cloud-based resources like databases and brokers, and REST APIs.

The CPU-351-13 also supports ESF, Eurotech's Java-based framework for embedded devices. With ESF it is possible to develop portable applications in a fraction of the time thanks to high level, industry specific APIs.

To kickstart your projects and accelerate time to market, contact the Eurotech sales team to order a development kit.



## System Architecture

PROCESSOR	Freescale i.MX6, 1 to 4 cores, up to 1.2GHz
MEMORY	Support to 4GB DDR3 - soldered
STORAGE	Up to 64GB eMMC Flash (4GB standard) MicroSD expansion slot SATA interface for SSD/HDD (dual/quad core)
NETWORK	2x Gigabit Ethernet
SERIAL INTERFACES	2x RS232/485/422 2x RS232 (optional) I <sup>2</sup> C SPI
PCI EXPRESS	MiniPCI express socket
WIRELESS	<b>GPS</b> - 50 channel receiver <b>WIFI</b> - 802.11 a/b/g/n- Access Point & Client (AP Linux only) <b>802.15.4/ZIGBEE</b> - yes <b>BLUETOOTH</b> - V4.0 (with Bluetooth Low Energy) <b>CELLULAR</b> - Internal option (contact factory) - ReliaCELL 10-20 (external adapter) <i>Technology: 2G GSM, 2.5G CDMA, 3G GSM, 3G CDMA, 4G LTE</i> <i>Approvals: AT&amp;T, Sprint, Verizon, T-Mobile, SKT, NttDocomo</i>
CAN	1x CANBus J1939(CAN)/J1979(OBDII)/J1708 (contact factory)
USB	3x USB 2.0, type A, 1x USB 2.0 (internal header)
VIDEO	LVDS RGB HDMI (optional) Two independent video ports (dual/quad core) 4/5 wire resistive touch controller
CAMERA INPUT	3x analog video inputs (contact factory)
AUDIO	Analog audio in/out
ANALOG INPUT	2x analog voltage in
DIGITAL I/O	8x isolated GPIO / 4x4 Key Pad
SENSORS	3 axis accelerometer
POWER	6 to 36VDC power in (5V optional) 4W typical Multi chemistry battery charger Li-ion/Polymer, LiFePO <sub>4</sub> , Lead Acid (contact factory) Smart Power Monitor
TEMPERATURE	Operating: -40 to +85°C (800MHz) -20 to +85°C (1.2GHz)
HUMIDITY	95% relative at +45°C non-condensing
SOFTWARE	Linux (Yocto), WEC7 Everyware Device Cloud ready Everyware Software Framework
PHYSICAL	Dimensions: 102 x 153mm

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