# CPU-351-13

**Low Power SBC - NXP i.MX6**

- **Multicore i.MX6 SBC**
- **Low Power**
- **Connection-oriented**
- **Natively Industrial**
- **Multiple Graphics**
- **Power Management**
- **IoT Native**

## Features

**Multicore i.MX6 SBC** - The CPU-351-13 offers configurations using single core, dual core or quad core technology to give to device manufacturers the right amount of processing power for their application
**Low Power** - The CPU-351-13 provides a large number of interfaces with a low power consumption in the order of 4W
**Connection-oriented** - Global cellular options, GNSS, Wi-Fi, Zigbee, Bluetooth 4.0 (with LE), and dual Gb Ethernet
**Natively Industrial** - Extended operating temperature, CAN bus interfaces, 3-axis accelerometer, integrated GNSS, and protected wide range power-in make the CPU-351-13 ideal for transportation and industrial applications
**Multiple Graphics** - The CPU-351-13 provides two video ports: LVDS and HDMI with integrated 4/5 wire resistive touch controller
**Power Management** - A on-board multi-chemistry battery charger simplifies the design of battery powered applications, and a smart power monitor allows to keep the power consumption beyond specified thresholds
**IoT Native** - The CPU-351-13 provides native support for IoT, including IoT middleware and access to Eurotech IoT Integration Platform

## Description

The CPU-351-13 is an iMX.6 Single Board Computer 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, CAN bus 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 10-20 expansion module, which provides pre-certified, worldwide coverage.
The CPU-351-13 accelerates the development and deployment of IoT applications: it supports EC, the Eurotech Integration Platform for embedded devices. EC is a complete offering consisting of open field protocols, cloud-based resources like databases and brokers, and REST APIs.
The CPU-351-13 also supports ESF, Eurotech 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.

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## Low Power SBC - NXP i.MX6

| Specifications | | |
|---|---|---|
| **PROCESSOR** | CPU | NXP i.MX6, 1 to 4 cores, up to 1.2GHz |
| **MEMORY** | RAM | Up to 4GB DDR3 Soldered-down |
| **STORAGE** | Embedded | Up to 64GB eMMC Soldered Down (4GB Standard Version) |
| | SATA | 1x SATA 2.0 (i.MX6Dual and i.MX6Quad Only) |
| | Other | 1x microSD Slot |
| **I/O INTERFACES** | Ethernet | 2x 10/100/1000Mbps |
| | USB | 3x USB 2.0 (Type A), 1x USB 2.0 (Internal Header) |
| | Serial | 2x RS-232/RS-422/RS-485 (DB9), 2x RS-232 (Optional) |
| | CAN bus | 1x CAN bus – J1939(CAN)/J1979(OBDII)/J1708 (Contact Factory) |
| | Digital I/O | 8x Isolated GPIO (with support for a 4x4 Key Pad) |
| | Analog I/O | 2x Analog Voltage In |
| | Video | 1x LVDS, 1x RGB, 1x HDMI (Optional) – 4/5 Wire Resistive Touch Controller: 3x Analog Video Inputs (Contact Factory) |
| | Audio | Analog Audio In/Out |
| | PCI Express | 1x Mini PCIe Slot |
| | I2C | Yes |
| | SPI | Yes |
| **OTHER** | Battery | Multi Chemistry Battery Charger: Li-ion/Polymer, LiFePO4 – Factory Option: Lead Acid |
| | Sensors | 3-axis Accelerometer |
| **POWER** | Input | 6 to 36VDC Power In (5VDC Optional) |
| | Consumption | 4W Typ. |
| | Management | Smart Power Monitor |
| **ENVIRONMENT** | Operating Temp | - 20 to +85°C or - 40 to +85°C (Depending on Specific CPU Version) |
| | Storage Temp | - 40 to +85°C |
| | Humidity | 95% Relative at + 45°C Non-condensing |
| **CERTIFICATIONS** | Environmental | RoHS2, REACH |
| **MECHANICAL** | Dimensions | 102x153mm (LxW) |
| **SOFTWARE** | OS | Support for Linux (Yocto), WEC2013 |
| | Iot Framework | Everyware Software Framework, Everyware Cloud Ready |

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