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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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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