

# **ECUcore-iMX35** NXP ARM 11<sup>TM</sup> based System on Module

The ECUcore-iMX35 is a cost-effective module that is based on NXP i.MX35 application processor family. It is specifically designed for industrial applications by providing a magnitude of interfaces used in the industrial application field. Additionally, basic multimedia interfaces allow for simple integration of graphical user interfaces.



## Specifications

Controller	NXP i.MX357 application core processor
Core Architecture	ARM 11™ with 532MHz
RAM	128MB DDR2-SDRAM
FLASH / EEPROM	128MB NOR / 32KB (SPI)
Communication	1x Fast Ethernet 10/100Mbps (1 PHY on-board), 2x CAN, 1x USB 2.0 (12Mbps full-speed), 3x UART, 1x OTG, 1x I <sup>2</sup> C, 1x SPI
Mass Storage	MMC/SD-card signals on board-to-board connector
Video	LCD-CMOS interface (18-bit RGB)
I/O	18x GPIO, 2x PWM/DIO, 2x Timer/Counter/DIO
Peripherals	DMA, MMU, hardware watchdog, temperature sensor, RTC
Board Connector	2 x 2x50pin header socket connector, 1.27mm pitch
<b>Board Dimensions</b>	78 x 54 x 7.2 (L x W x H in mm)
Power Supply	3.3V DC single voltage
Temperature Range	-40°C +85°C
Operating System	Linux with X server and QT framework
	Pre-integrated Eclipse-based IDE with GNU C/ C++ tool chain, source- and assembly-level debugger
	CANopen® Protocol Stack Source Code, Ethernet POWERLINK Protocol Stack Source Code
	IEC 61131-3 runtime kernel pre-installed (OpenPCS or CODESYS), Shared process image, CiA302/314 compliant CANopen manager
	OpenPCS IEC 61131 programming system (infoteam Software), CODESYS V3.5 (3S)

The ECUcore-iMX35 is a System on Module based on the NXP i.MX357 MCU. It provides the perfect balance of performance, power consumption, connectivity and media capabilities necessary to drive today's multimedia applications. The ECUcore-iMX35 serves a broad range of consumer, industrial and general embedded applications.

In the form of an insert-ready core module, it provides to the user a complete single board computer subassembly that is programmable under Linux and is available with an integrated Target Visualization. Due to its CAN and Ethernet interfaces, the ECUcore-iMX35 is best suited to realize custom specific HMI (Human Machine Interface) applications.

## About SYS TEC electronic

**SYS TEC electronic** is a system house for customized electronic systems. Founded in 1990 in Germany, SYS TEC electronic has more than 25 years of experience providing a comprehensive service from consulting to OEM integration and series production or transfer of technology to our customers in the field of industry, transportation, communication, energy and computing.

#### For detailed configuration options please contact us!



#### Software Support

- Linux OS Board Support Package
- Pre-integrated IDE with cross-platform toolchain
- Communication protocols (optional): POWERLINK, CANopen, Modbus TCP
- IEC 61131-3 PLC Runtime Systems (optional): CODESYS V3.5 (3S) or OpenPCS (infoteam Software)
- Target- and Web-Visualization

#### **Development Kit**

This cost-effective Development Kit enables a quick start of application development based on the NXP i.MX357 application processor and ECUcore-iMX35. The important interfaces are already configured at the Development Board.

9-36VDC 9-36VDC
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Development Board



Development Board



Development Board with TFT-LCD Display and Membrane Keypad

#### Kit contents:

- ECUcore-iMX35
- Development Board
- Virtual machine with IDE and toolchain
- Board schematics
- Email and web support

We are looking forward to discussing with you your very own customized Development Kit or ECUcore-iMX35 configurations.

Please contact us to discuss the possible configuration!

 Ordering Information
4001025 ECUcore-iMX35
KIT-169 Development Kit ECUcore-iMX35
For quotations please contact us: +49 3765 38600-2110 sales@systec-electronic.com

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Release