

## ECUcore iMX35 NXP ARM 11™ 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.

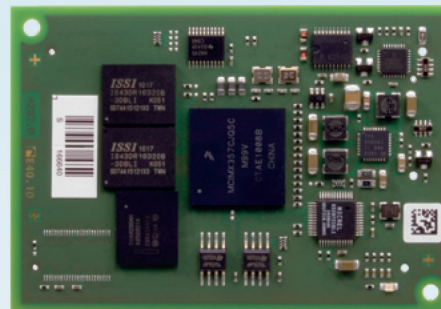
32-bit ARM 11™ Core

Long-term Availability

Optimized for Industrial and Embedded Applications

Optional Pre-installed PLC Firmware

Pre-installed Linux OS



## Specifications

<b>Controller</b>	NXP i.MX357 application core processor
<b>Core Architecture</b>	ARM 11™ with 532MHz
<b>RAM</b>	128MB DDR2-SDRAM
<b>FLASH / EEPROM</b>	128MB NOR / 32KB (SPI)
<b>Communication</b>	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
<b>Mass Storage</b>	MMC/SD-card signals on board-to-board connector
<b>Video</b>	LCD-CMOS interface (18-bit RGB)
<b>I/O</b>	18x GPIO, 2x PWM/DIO, 2x Timer/Counter/DIO
<b>Peripherals</b>	DMA, MMU, hardware watchdog, temperature sensor, RTC
<b>Board Connector</b>	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)
<b>Power Supply</b>	3.3V DC single voltage
<b>Temperature Range</b>	-40°C ... +85°C
<b>Operating System</b>	Linux with X server and QT framework
<b>Integrated Development Environment (IDE)</b>	Pre-integrated Eclipse-based IDE with GNU C/ C++ tool chain, source- and assembly-level debugger
<b>Complementary Middleware</b>	CANopen® Protocol Stack Source Code, Ethernet POWERLINK Protocol Stack Source Code
<b>PLCcore Firmware (optional)</b>	IEC 61131-3 runtime kernel pre-installed (OpenPCS or CODESYS), Shared process image, CiA302/314 compliant CANopen manager
<b>IDE Support for PLCcore</b>	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.

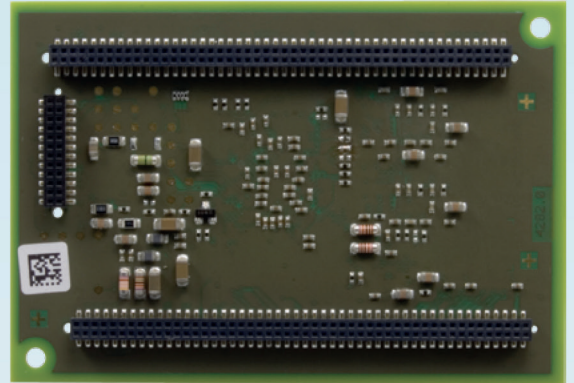
## About SYS TEC electronic

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!

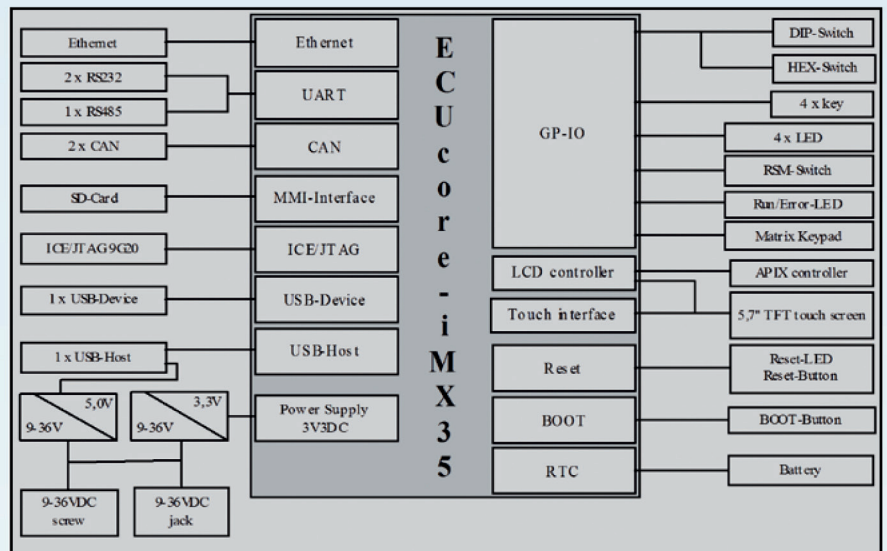
## Software Support

- 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

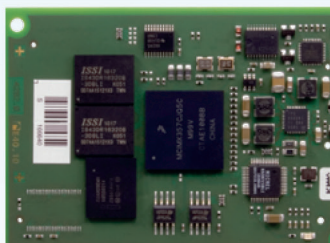


## Development Kit

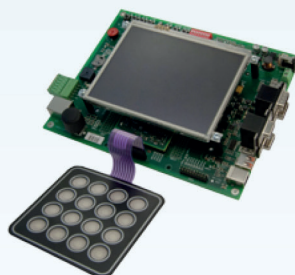
This cost-effective Development Kit enables a quick start of application development based on the NXP i.MX357 application processor and ECUcore-iMX35. The important interfaces are already configured at the Development Board.



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!