CASCADEMIC Solutions Pvt. Ltd.

CASCADEMIC solutions

In the era of the smart and the convergence of technologies, we at CASCADEMIC extended and evolved our decades of embedded expertise from the SCADA to the M2M & Growing IoT space.

CASCADEMIC is a Fabless ODM Solution Provider in M2M and IoT. Specializing in Wireless Remote Monitoring, Sensors, and Controls & Industrial Automation.

In the process of continuous evolution and upgradation of technology, the process and processor SoC's are evolving and becoming more and more integrated. In addition, the complexities around RF, Ultra low power, Wireless protocols, and Embedded Java & Real time firmware applications built-on many such industrial embedded devices with long term reliability and availability requirements are increasing.

By addressing the above needs from the Concept to Manufacturing Vertical Integration, we act as an ODM partner for our Customer's Intelligent System Solution needs of:

Wireless Smart Flow Meter
OEM Thermal Printer Solution
Wi-Fi RFID Access Control Solution
Wireless Sensor Networks
Smart Automation & Control
GPS NAVI TRACK

ADDRESS

CASCADEMIC Solutions Pvt. Ltd.
1525/58, 2nd Floor, 28th Main,
South End 'B' Cross,9th Block,
Jayanagar, Bangalore-560069
INDIA
Phone: 080 2658 3333

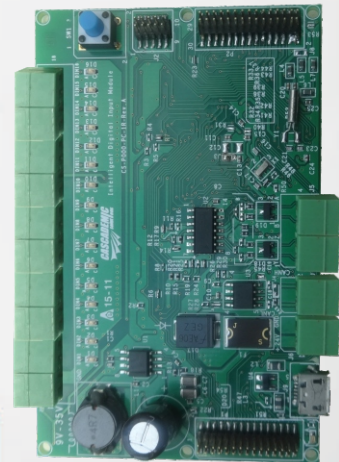www.cascademic.com

Email: **info@cascademic.com**

Dunamis A11 - K10 Intelligent Digital input Module

Rs485 and CAN BUS Interface

Up to 500 kHz sampling frequency

Wire-Break and Under-voltage detection

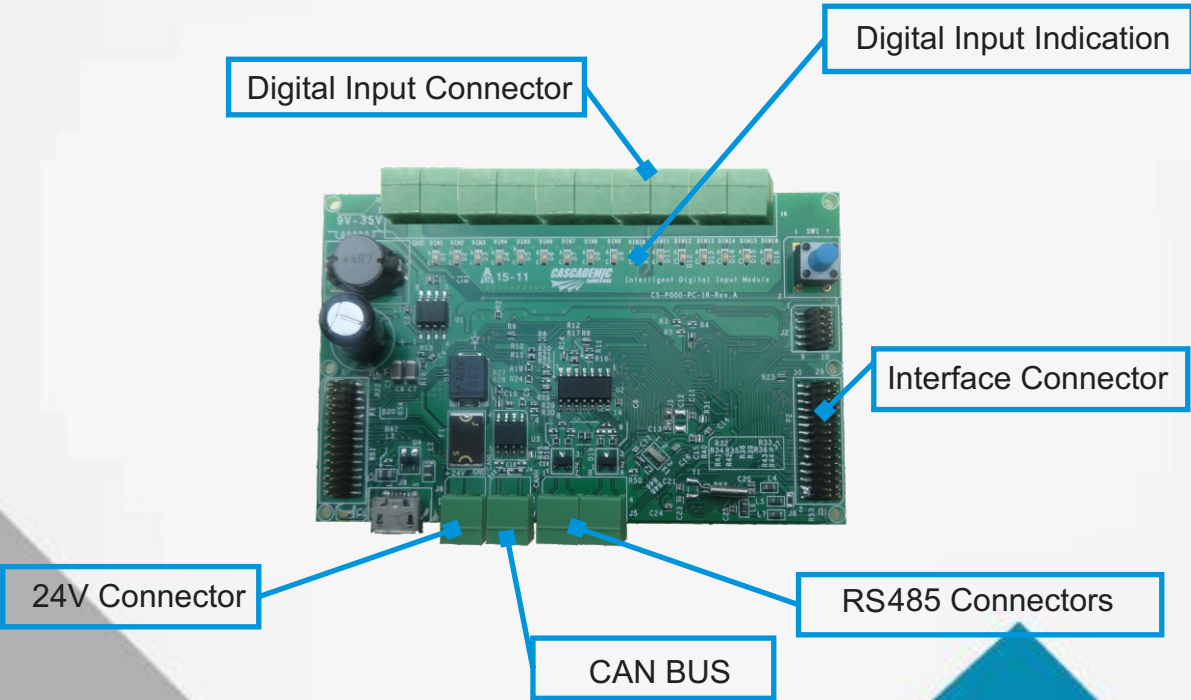**16 fully isolated digital input signal with IEC61131-2**

Description:

The Intelligent Digital Input Module is a Freescale Kinetis Microcontroller based board with digital isolator ,designed mainly for automotive industrial application.

The board features ARM Cortex M4 Architecture,8KB RAM and 64 KB flash memory. ARM Cortex M4 processor has operating frequency up to 72MHz. Also the Digital Input module has Digital Isolator and Texas Instrument's CAN BUS and RS485 driver ICs. The module has 16 number of digital inputs which can support various types of sensors with output up to 35V. Also the module can support various types of communication interfaces like I2C,UART,I2S and USB.

Board:

Digital Input Indication

Digital Input Connector

Interface Connector

24V Connector

CAN BUS

RS485 Connectors

Features:

Specification	Description
Power supply:	5V supply through USB (or) 9V to 24V through the terminal block.
MCU:	Up to 72 MHz ARM® Cortex-M4 core.
Security:	Unique identification ID for each IC. Wire-Break and Under-voltage detection
Memory:	64KB on-chip Flash & 8KB RAM. Expandable up to 256KB on-chip Flash & 32KB RAM.
Communication Interfaces:	2UART modules. One 8/16-bit SPI. Two I2C. Full duplex – I2S interface. Full speed USB OTG. CAN BUS. RS485(MODBUS Protocol).
Connecters:	Four peripheral connectors enabling major communication interfaces. 10 pin Debug connector supporting JTAG.
Sampling Rate:	Up to 500 kHz.
Form Factor:	85×53.98mm (Approx. Credit card Size).
Digital Input:	16 isolated(Galvanic Isolation 500VAC) digital inputs with IEC61131-2that support different types of sensors with output up to 35V.
Analog Interface:	16 bit ADC (Up to 3.3V). 12 bit DAC.

Application:

→ Industrial Automation.
→ PLC Application.
→ Tower monitoring system.
→ Elevator application.