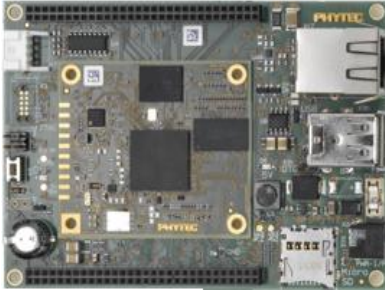


# Industrial I/O Control “phyBOARD-RANA-AM335x” ARM Single Board Computer



## What is phyBoard-RANA?

The RANA is a richly featured Industrial Input/Output and community-supported development platform for engineers to immediately develop applications with Linux, WinCE & Android.

### phyBoard-RANA Features

#### SOM

- PhyCORE-AM335x
- ARM® Cortex™-A8@600MHz
- 128 MB upto 1GB DDR3 RAM
- 128 MB upto 2GB NAND
- 8 MB NOR (Optional)
- 32 KB EEPROM (Optional)

#### On Board Devices

- 2 x USB Host / OTG
- 1 x 10/100 Ethernet
- SD Card
- Battery (backup for RTC)

#### Display Interface

- 24bpp TTL

### Communication Interfaces

- 1 x UART (RS232)
- 5 x UART (TTL)
- 2 x I<sup>2</sup>C
- 2 x SPI
- 2 x CAN

### Expansion Connectors\*

- 1 x ADC(12 Bit, 8 Channel)
- 80 GPIOs
- JTAG

### General

- Form Factor: Pico-ITX(100 x 72mm)
- Power: 5V DC

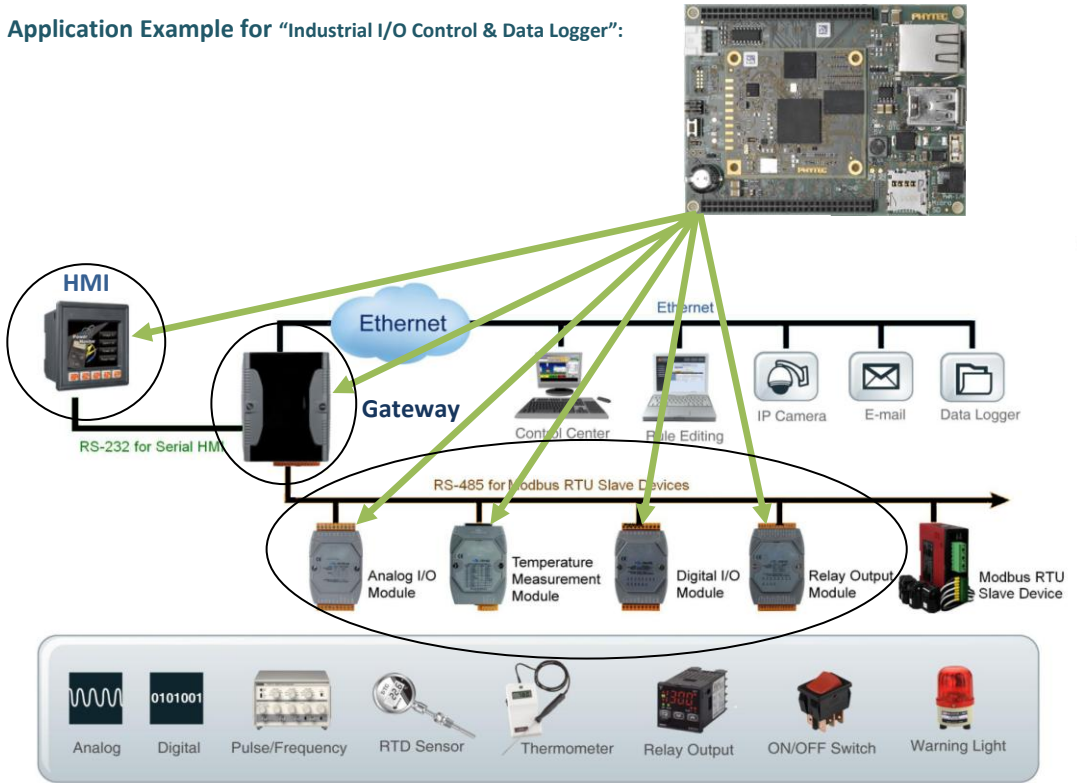
Note: All the Pins in expansion Connector are multiplexed

## Application

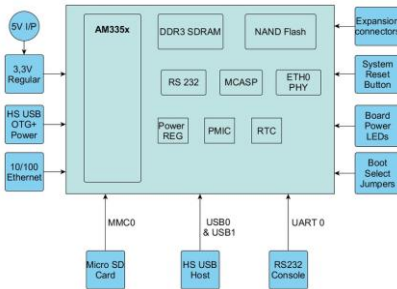
PHYTEC SOMs have been deployed in thousands of systems across a wide variety of industrial verticals like:

- Building Automation
- Green Computing
- Medical equipment
- Security
- High-tech farming
- Industrial Automation
- Smart energy system
- Military and Aerospace
- Fitness equipment
- TMI and Transportation

## Application Example for "Industrial I/O Control & Data Logger":



## Block Diagram:



## Optional Accessories / Add-ons

- Accessories (Power Adapter, Serial Cable, Ethernet Cable, OTG Cable, Patch Card)
- LCD with touch 3.5"/4.3"/7"
- GPS/GPRS Module
- Wi-Fi / BT
- VGA
- RS 485 Break out Board

## Documentation & Software

- Hardware Manual
- Software Manual
- Quick Start Guide

## Package Contents

- phyBOARD-RANA-AM335x
- DVD (includes Documents & Board Support Package)

## BSP Sources

- Linux
- Android
- Windows CE7
- QT

## Support

- Wiki
- Forum
- Community
- Premium Support