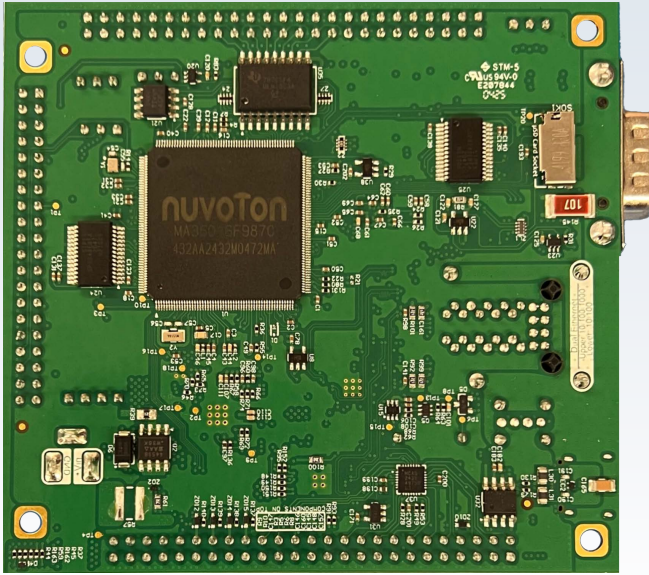




## Features

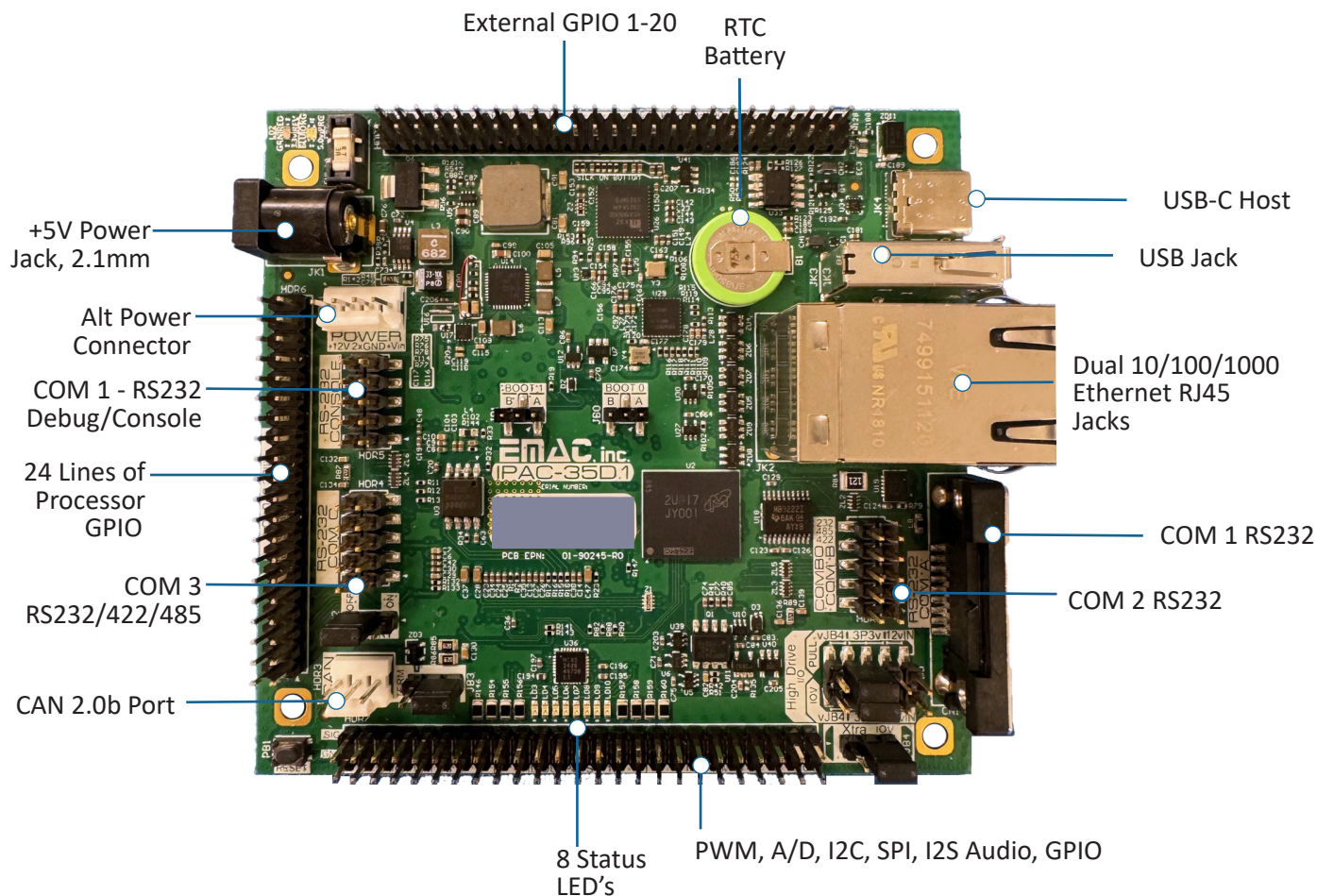
- NuvoTon Dual 64-bit ARM Cortex A35 800MHz
- Additional 180Mhz Cortex M4 RT Processor
- 4GB of eMMC Flash & 512MB of DDR3L RAM
- Dual Ethernet (1x 1000 BaseT & 1x 100 BaseT)
- 36x GPIOs & 8 High Drive Outs
- 3x Serial RS232 Ports & 1 RS485 Port
- 2x High Speed USB 2.0 Ports
- Micro SD Card Socket
- Multiple A/D, SPI, I2C, I2S & CAN Ports



## Specifications

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor   | NuvoTon NuMicro® MA35D1 Dual ARM Cortex A35 800MHz & 180Mhz Cortex M4 Processor<br>800 Mhz & 180MHz Cortex M4 RT Processor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Memory      | 4GB of eMMC Flash<br>16MB of Serial Data Flash<br>512MB of DDR3L RAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| IO          | 1x RS232 serial DB9 port with RTS/CTS handshake<br>2x RS232 serial ports with RTS/CTS handshake (10 pin header)<br>1x RS232/485 serial port with RTS/CTS handshake (10 pin header)<br>1x USB 2.0 High speed Host port (Type C; no USB Port Control)<br>1x USB 2.0 High speed OTG (Type A)<br>1x 10/100/1000 BaseT Ethernet<br>1x 10/100 BaseT Ethernet<br>1x CAN Port<br>1x I2S External Port<br>1x External I2C & 1x SPI External Port<br>32x General Purpose Digital I/O (3.3V/5V Tolerant) Lines<br>4x General Purpose Processor Digital (3.3V) I/O lines<br>8x High Drive Digital Outputs (Open Collect; 500mA Sink)<br>External Reset Button provision |
| Analog      | 4x channels of 12-bit A/D (0 to 2.5V)<br>32x 8-bit PWM Channels (shared with GPIOs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Video       | none                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Dimensions  | 96 mm x 90 mm / 3.77" x 3.54"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Power Req.  | +5 volt board input voltage required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Environment | Temperature Range: -40 to +85°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |





## Ordering Information

| Product #     | CPU                                | Memory                                      | Serial                 | GPIO /PWM | USB                               | Analog                  | LAN                   | CAN | Temperature    |
|---------------|------------------------------------|---------------------------------------------|------------------------|-----------|-----------------------------------|-------------------------|-----------------------|-----|----------------|
| IPAC-35D1-000 | NuvoTon Dual 64-bit ARM A35 800MHz | 512MB DDR3<br>4GB eMMC<br>16MB Serial Flash | 3x RS232<br>1x 232/485 | 44x /32x  | USB 2.0<br>1x Type A<br>1x Type C | 8x 10-bit A/D<br>2x PWM | 1x 1G<br>1x 100 BaseT | 1x  | -40° to + 85°C |

## Optional Accessories

| PRODUCT #     | POWER SUPPLY                                       |
|---------------|----------------------------------------------------|
| PER-PWR-00032 | 5V @ 2.5A Power supply (110V @ 60 Hz US)           |
| PER-PWR-00033 | 5V @ 3.2A Power supply (100-220V @ 47-63 Hz Intl.) |

| PRODUCT #     | TERMINAL BOARDS                                          |
|---------------|----------------------------------------------------------|
| PCD-39E00-000 | Screw Terminal Board Kit w/40 & 50 pin connection cables |
| PCD-3950      | 50-pin Wire Screw Terminal Block, with Flat Cable        |

\*Requires Qty. 2 Terminal Boards to utilize all GPIO