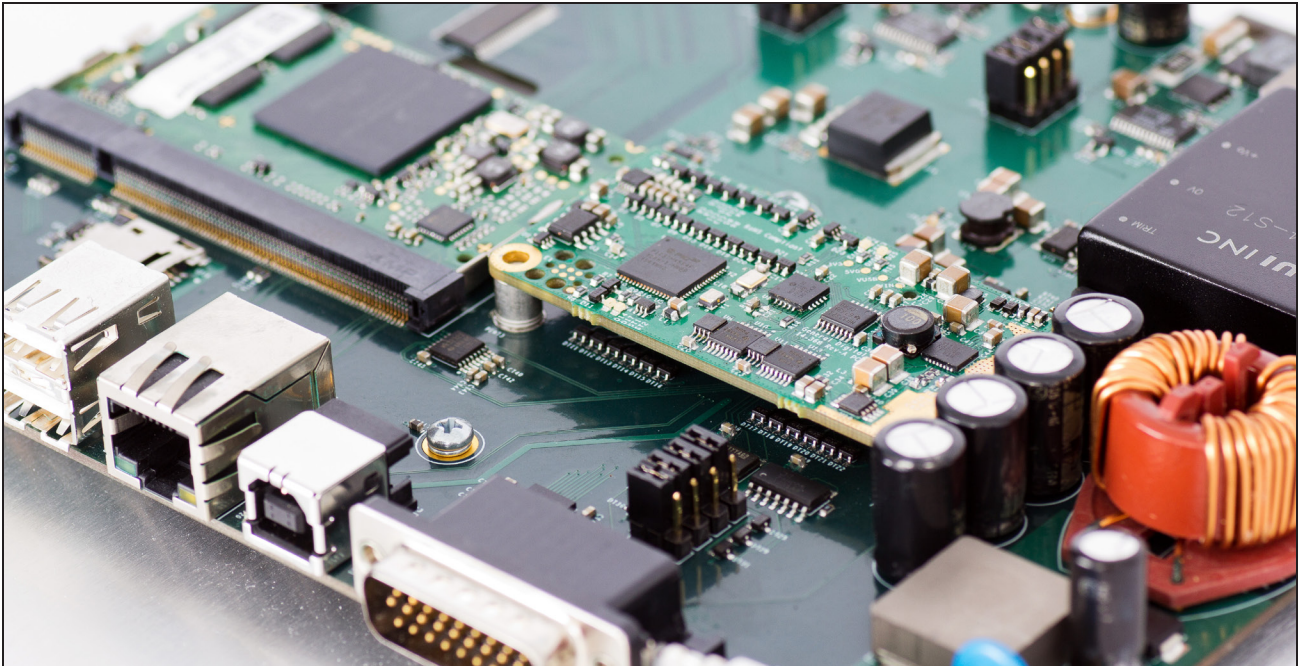


# GENDEX i.MX6™



The GenDEX i.MX6 motherboard is a fully integrated HMI solution built around the Toradex™ Colibri i.MX6 module. It is ideally suited to industrial applications that require interfaces not commonly found on other HMI systems. This specialized motherboard has been designed to accept up to three expansion boards to allow the ARM® processor to interface with I/O, CAN bus, serial links, motor controllers, and more.

## CPU MODULE

- ▶ Up to 1.0 GHz i.MX6 Dual Core
  - ARM® Cortex™ A-9
- ▶ Up to 512 MB DDR3 RAM
  - 32-bit Bus
- ▶ 4 GB On-board eMMC Solid-State Storage
  - Expandable via microSD

## MOTHERBOARD

- ▶ Dual 8-Channel LED Drive
  - Supports Sunlight Readable, Night Vision Goggle Backlight
  - 3000:1 Dimming Ratio
  - Fan Controller
- ▶ Up to 3 Fans
  - Integrated Power Supply
  - Dynamic Fan Speed Based on Thermal Feedback
- ▶ Integrated Power Supply
  - 9–36 VDC Input
  - 2W2 Connector
- ▶ Internal Expansion Ports (x3)
  - ARINC 429 Expansion Board Available
  - Custom Expansion Boards Available Upon Request
- ▶ Rotary Encoder Inputs (x4)
  - Internal (x2)
  - External (x2)
- ▶ USB Maintenance Port

## I/O

- ▶ Ethernet
  - 10/100 RJ45
- ▶ USB 2.0 (x2)
  - Type A, Host
- ▶ RS-232 (Up to 3x)
  - DA-26
- ▶ RS-485 (Up to 3x)
  - DA-26
- ▶ DVI-D Output
- ▶ Discrete Inputs
  - Power Enable
  - Reset
  - Dimming
  - Backlight Enable
  - Sunlight Readable/Night Vision Goggle Mode

## ENVIRONMENTAL

- ▶ Temperature
  - Operating/Storage: -40° C to 60° C / -40° C to 85° C
- ▶ Humidity
  - 10% to 90% RH Non-condensing

## VALUE ADD

- ▶ Standard and Custom Expansion Modules
- ▶ Contract Software and Firmware Development
- ▶ Driver Development