

HMT7748 - EM258

The EM258 GENIE Explorer III development board allows a simplified connection for the development of sensor or actuator applications using the HMT7748 GENIE IO-Link DEVICE DUAL PHY. The EM258 can be used to:

- evaluate the HMT7748 DUAL PHY
- develop sensor and actuator applications
- evaluate and develop products with the HMT IO-Link Mini-Stack software and Demo Application

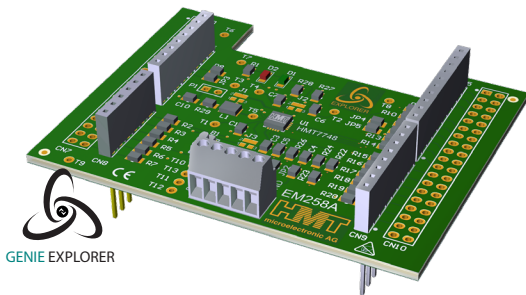


Fig.1: EM258 Development PCB

Together with the HMT IO-Link Mini-Stack and Demo Application software, the EM258 demonstrates the complete feature set of the HMT7748 DUAL PHY, which includes:

- Multi-Octet mode
- Single-Octet mode
- Transparent mode†
- interrupt handling
- device monitoring
- device configuration

Features

- HMT7748 DUAL PHY in 4mm x 4mm QFN20
- 2 x status LED's (1 x red, 1 x green)
- push button (digital sensor stimulus)
- HW/SW configurable integrated DCDC converter
- 2 x integrated 50mA LDO's (3.3V & 5.0V)

Compatibility

The EM258 is compatible with the following microcontroller and sensor development environments:

- STM32 NUCLEO-L073RZ
- ST X-NUCLEO-IKS01A2 motion MEMS and environmental sensor expansion board
- Arduino™ Uno V3

Included in the delivery

- EM258 datasheets (inc. schematic and layout)
- HMT7748 DUAL PHY datasheet
- HMT IO-Link Mini-Stack and Demo Application
- HMT IO-Link Mini-Stack user guide (html)
- HMT Demo Application software guide

† Currently only available on ATMEGA328 microcontroller

STM32 - NUCLEO L073RZ

The STM32 Nucleo.64 development PCB provides a practical development environment for customers working with HMT's IO-Link Mini-Stack and Demo Application on STM microcontrollers. Key features include:

- STM32F103 microcontroller in LQFP64 package
- 32kBytes of flash memory
- 1 user LED
- 1 user and 1 reset push-button
- 32.768 kHz crystal oscillator
- ST morpho extension pin headers for full access to all STM32 I/Os
- Flexible power-supply options: ST-LINK, USB VBUS or external sources such as the EM258
- On-board ST-LINK debugger/programmer

Can be ordered directly at HMT together with the EM258 GENIE Explorer III development board.

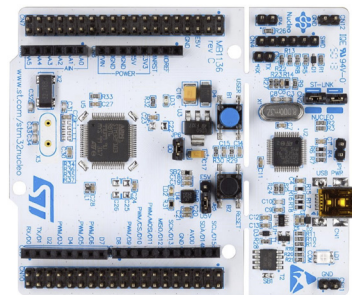


Fig.2: Nucleo-L073RZ Development PCB

ATMEGA328 - Arduino™ UNO

The Arduino™ Uno development PCB provides a practical development environment for customers working with HMT's IO-Link Mini-Stack and Demo Application on MicroChip microcontrollers. Key features include:

- ATmega328 microcontroller
- 32kBytes of flash memory
- 14 digital I/O interfaces (6 of which can be used as PWM output)
- 6 analogue inputs
- 16 MHz crystal oscillator

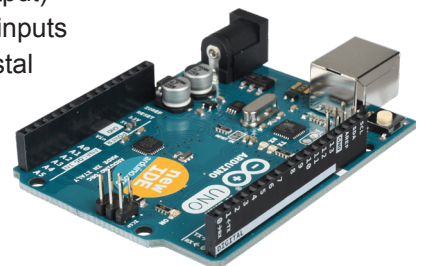


Fig.3: Arduino™ Uno Development PCB

Can be ordered directly at HMT together with the EM258 GENIE Explorer III development board.