

Release Date: 2022/1/11

ASIX Launches New EtherCAT to IO-Link Gateway Solution

Optimistic about the prospects of IO-Link intelligent communication technology, ASIX Electronics launches the newest "AX58400 EtherCAT to IO-Link Gateway Solution", which combines EtherCAT industrial Ethernet fieldbus technology and IO-Link intelligent communication technology.

HSINCHU, Taiwan – Jan. 11th, 2022 – In response to the strong demand of the global industry 4.0 smart manufacturing market, ASIX Electronics Corporation (Taiwan Stock Exchange: 3169: Taiwan) has continuously deepened the development of industrial Ethernet controller solutions, and launched the cost-effective AX58x00 family EtherCAT slave controllers/microcontrollers solutions for industry Ethernet fieldbus applications. In order to further provide customers with complete industrial Ethernet fieldbus solutions, ASIX actively invests in the development of new IO-Link master communication protocol stack technology, and today launches the newest "**AX58400 EtherCAT to IO-Link Gateway Solution**", which combines EtherCAT industrial Ethernet fieldbus technology and IO-Link intelligent communication technology. Using this EtherCAT slave to IO-Link master gateway solution, customers can easily install the newest IO-Link smart sensors and actuators on EtherCAT industrial Ethernet networks in smart factory.

The IO-Link intelligent communication standard (IEC61131-9) is the world's first open standard point-to-point serial communication protocol for communicating with smart sensors and actuators. The IO-Link communication system consists of an IO-Link master and IO-Link devices such as smart sensors and actuators. The IO-Link master can access information such as manufacturing process data, device configuration parameters and self-diagnosis results from IO-Link devices, and can establish two-way digital data exchange with industrial Ethernet fieldbus PLC. Therefore, the industrial PLC can remotely receive the manufacturing process data from IO-Link smart devices, monitor the health status of IO-Link smart devices for preventive equipment maintenance or replacement, and configure the parameters of IO-Link smart devices to meet various manufacturing needs. It is worth mentioning that the IO-Link intelligent communication technology and industrial Ethernet fieldbus technologies, such as EtherCAT, PROFINET, EtherNet/IP, Modbus TCP, etc., are a cooperative relationship rather than a competitive relationship. Using IO-Link intelligent communication technology, industrial computers can be easily connected to IO-Link master via industrial Ethernet fieldbus networks to remotely monitor and configure IO-Link smart devices, so manufacturers can easily build up more flexible and effective manufacturing environment in smart factory.

AX58400 EtherCAT to IO-Link gateway solution supports up to 8 IO-Link devices, such as smart sensors and actuators, through AX58400 EtherCAT Slave Controller with Dual-Core MCU and ASIX's own IO-Link Master Protocol Stack. AX58400 is equipped with the highest-performing 480MHz ARM® Cortex®-M7 core, 240MHz ARM® Cortex®-M4 core that can operate in parallel, EtherCAT Slave Controller integrated with two embedded Fast Ethernet PHYs, and embedded 2Mbytes dual-bank Flash memory and 1Mbyte SRAM. This solution uses the highest-performing ARM® Cortex®-M7 core to process the IO-Link master protocol stack operation for supporting up to 8 IO-Link devices; and uses the ARM® Cortex®-M4 core to process EtherCAT slave protocol stack operation in parallel. Using AX58400 dual-core MCU architecture can effectively reduce the CPU load of microcontroller and generate a higher-performance EtherCAT slave to IO-Link master gateway solution.

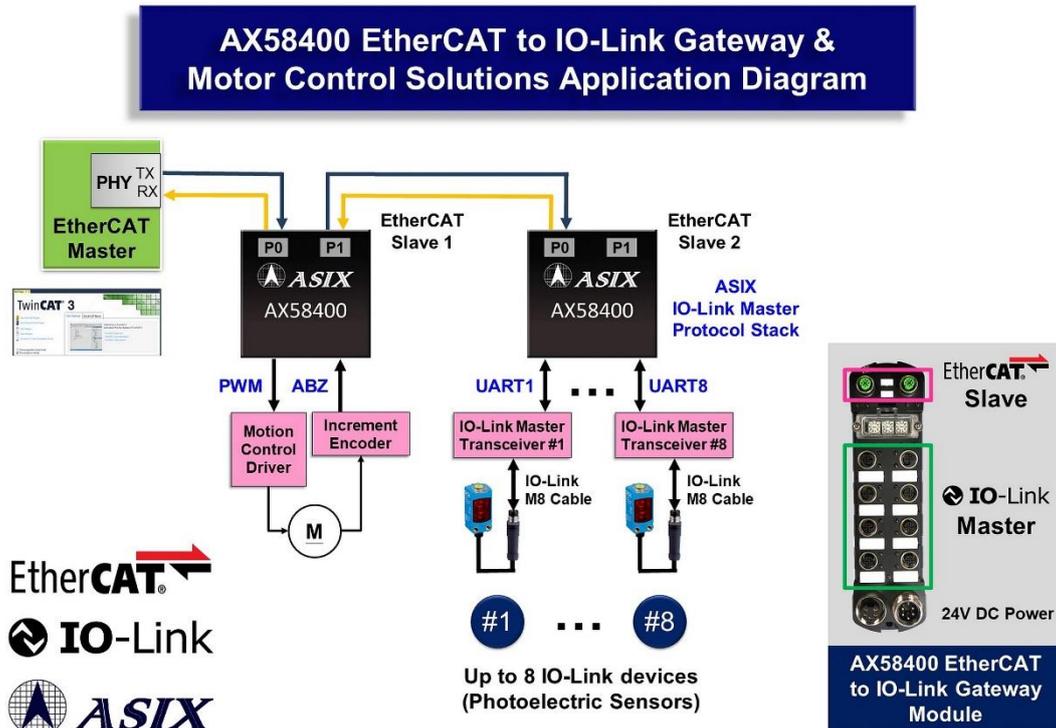


Figure-1. ASIX AX58400 EtherCAT to IO-Link Gateway Solution

ASIX has outstanding engineering teams to provide customers the professional and timely technical services. ASIX offers different technical services for AX58400 EtherCAT to IO-Link gateway solution to meet customer needs. For more product and services information, please contact ASIX Electronics Corp. via e-mail: sales@asix.com.tw.

About ASIX Electronics Corporation

ASIX Electronics Corporation is a leading fabless semiconductor supplier with focus on networking, communication and connectivity applications. ASIX was founded in May 1995 in Hsinchu Science Park, Taiwan, and has been listed on Taiwan OTC Stock Exchange (TAIEX code 3169) since November 2009. ASIX products include Industrial Ethernet ICs, SuperSpeed USB Ethernet ICs, Non-PCI/SPI Embedded Ethernet ICs, Interface ICs, RS-232/RS-485 Transceivers and Ethernet/Wi-Fi/USB KVM SoCs. ASIX has been certified as an ISO 9001 and 14001 suppliers. This achievement represents our continuing commitment to maintain a world-class quality system. For more information, please visit ASIX website: <https://www.asix.com.tw/>.