

# MERLIN MTC-One

Your **key** to a robust networked shop floor

Unlocking the true power of Data-Driven Manufacturing

With MTC-One, a new breed of IIoT hardware, equip your machine tools, and assembly, production or processing line with the true power of edge computing. Take control of your shop floor and optimize efficiency by monitoring up to 110 sensor devices with a single MTC-One. Furthermore, leverage the dual Ethernet ports and the wireless capability to dramatically reduce production interruption and minimize the reoccurring costs associated with cable installation.

## FEATURES

- NXP®/Freescale i.MX 6DualLite, ARM Cortex™-A9, 1.0 GHz, Dual Core, 512MB DDR3 (64 Bit), 4GB eMMC (8 Bit),
- Wireless Connectivity via Wi-Fi b/g/n
- Wired Connectivity with 2 x 10/100 Mbit IEEE1588 Ethernet
- 4 USB 2.0 Hi-Speed type A connector at 500mA/port
- USB OTG (Micro A-B connector) Diagnostic port
- On-board RTC with Battery Backup
- Micro SD Card Slot for logging data when device is not connected to the network
- DVI-I display connector
- Up to 110 Optional USB devices
- 8 on-board digital input Interface (0-36V)
- Software selectable input trigger thresholds
- 2 on-board digital outputs (Dry Contact, Fuse 33V at 1.85 A)
- Magnetic or screw mount
- On Board Fieldbus/Industrial Ethernet Protocol Interface
- Power Input, 6-27 VDC
- Graceful Shutdown Circuitry to prevent data corruption
- OS- Linux friendly
- Optional sensors - eight channel ADC, thermocouple, Accelerometer, RH sensor, Power monitoring, Digital Input and Digital Output

## BENEFITS

- User configurable software for robust configuration
- Field upgradeable Firmware, future proofing your investment
- Comprehensive signal management
- Flexible power requirements
- Robust sensor capabilities supporting up to 110 individual sensors
- Catastrophic power failure protection
- High voltage surge protection to protect your machines
- Minimizing cabling costs with Dual Ethernet
- Optional data logging for data retention and integrity
- Native Merlin connectivity and support for rapid deployment
- MTConnect® output to the latest MTConnect® agent
- Genuine industrial strength hardware



MERLIN is an IIoT Shop-Floor-To-Top-Floor communications platform that provides manufacturing analytics in Real-Time.



## ABOUT MEMEX™

The Industrial Internet of Things (IIoT) powered by machine to machine (M2M) connectivity coupled with software capable of collecting, analyzing, and intelligently presenting streams of manufacturing data represents no less than the next Industrial Revolution. MEMEX with its visionary attitude has been on the leading-edge of the convergence of the industry trends in Computing Power, Connectivity of Machines, Industry Standards, Advanced Software Technology, and Manufacturing Domain Expertise. Leading this transformation is MEMEX Inc., the developer of MERLIN, an award winning IIoT technology platform that delivers tangible increases in manufacturing productivity in Real-Time.

MEMEX, with its comprehensive understanding of the manufacturing industry, is the global leader in machine to machine connectivity solutions.

Committed to its mission of “Successfully transforming factories of today into factories of the future” and encouraged by the rapid adoption and success of MERLIN, MEMEX is relentlessly pursuing the development of increasingly innovative solutions suitable in the IIoT era. MEMEX envisions converting every machine into a node on the corporate network, thereby, creating visibility from shop-floor- to-top-floor.

MEMEX, with its deep commitment towards machine connectivity, offers solutions that are focused on finding hidden capacity by measuring and managing Real-Time data. This empowers MEMEX’s customers to effectively quantify and manage OEE, reduce costs and incorporate strategies for continuous lean improvement.



### PRODUCTIVITY

10%-50% average productivity increase



### PROFITS

20% + profit improvement based on just a 10% increase in OEE



### PAYBACK

payback in less than four months with an Internal Rate of Return (IRR) greater than 300%



### CONNECTIVITY

connects to any machine, old or new

Contact MEMEX to implement IIoT data-driven manufacturing now.



**MEMEX**  
Measuring Manufacturing Excellence™

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