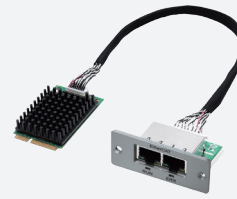
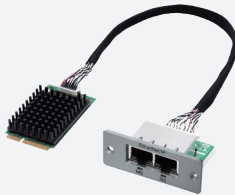




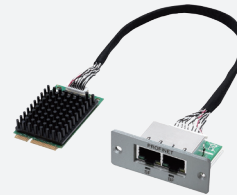
**FBI90E-REM**  
(P/N: 10J50090E00X0)



**FBI 90E-ECS Universal Kit**  
EtherCAT Slave Module Kit  
w/ Universal Bracket  
(P/N: 10J50090E16X0)



**FBI 90E-EPS Universal Kit**  
EtherNet/IP Slave Module Kit  
w/ Universal Bracket  
(P/N: 10J50090E17X0)



**FBI 90E-PNS Universal Kit**  
PROFINET Slave Module Kit  
w/ Universal Bracket  
(P/N: 10J50090E18X0)

**FBI 90E-EPM Universal Kit**  
EtherNet/IP Master Module Kit  
w/ Universal Bracket  
(P/N: 10J50090E20X0)

**FBI 90E-PNM Universal Kit**  
PROFINET Master Module Kit  
w/ Universal Bracket  
(P/N: 10J50090E21X0)

## Main Features

- Support PROFINET, EtherNet/IP, EtherCAT Master Interface (depends on the downloaded firmware)
- Real Time EtherNet Communication
- Mini-PCIe Form Factor
- Driver Support for Windows, WinCE, RTX, QNX, VxWorks, Linux
- Fully Compatible with PROFINET, EtherNet/IP, EtherCAT Controllers and I/O Modules
- 2 x RJ45 Connectors
- User Friendly Configuration Utility
- OPC Server Support (Optional)

## Product Overview

The FBI 90E-REM is the Fieldbus module supports industrial real time EtherNet Fieldbus protocols for ProfiNET, EtherNet/IP, EtherCAT. Users can download the required firmware to make this card as the master interface for these protocols. By equipping this interface card, it can enable the platform to be the control station for the ProfiNET, EtherNet/IP, EtherCAT slave devices.

## Specifications

### Form Factor

- mini-PCIe card with separated connector board

### PROFINET Master

- I/O Devices max.: 128
- Cyclic Data max.: 11472 Bytes
- Acyclic Data : Read/Write Record max 4096 Bytes/Request
- Functions:
  - Alarmtreatment
  - DCP
  - Minimum cycle time 1 ms

### EtherNet/IP

- Cyclic Data max.: 11472 Bytes
- Unscheduled Data max.: 504 Bytes per Telegram
- Functions:
  - Max. 64 connections
  - Cyclic Connection
  - UCMM class 3 supported
  - DHCP, BOOTP
  - Server Service
    - Get\_Attribute\_Single/All
    - Set\_Attribute\_Single/All

### EtherCAT Master

- Slaves max.: 200
- Cyclic Data max.: 11520 Bytes

- Acyclic Data: CoE (CANopen over EtherCAT)  
Up-/Download max. 1500 Bytes
- Functions:
  - Get OD List
  - Emergency
  - Topology Line

## Ordering Information

- **FBI 90E-ECS Universal Kit (P/N: 10J50090E16X0)**  
EtherCAT slave module kit w/ universal bracket
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EtherNet/IP slave module kit w/ universal bracket
- **FBI 90E-PNS Universal Kit (P/N: 10J50090E18X0)**  
PROFINET slave module kit w/ universal bracket
- **FBI 90E-ECM Universal Kit (P/N: 10J50090E19X0)**  
EtherCAT master module kit w/ universal bracket
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EtherNet/IP master module kit w/ universal bracket
- **FBI 90E-PNM Universal Kit (P/N: 10J50090E21X0)**  
PROFINET master module kit w/ universal bracket