

# MIC Advanced Flex I/O Series

## I/O Expansion Kit for MIC-7 Series



### Features

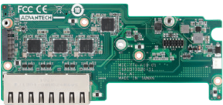
- Flexible expansion for additional I/O and functions in MIC-7 systems
- Expansion on the front for same-side cabling for easy maintenance
- Keeps compact size, fanless design, and wide operating temperature advantages of MIC-7 series
- Supports NVMe M.2 SSD via PCIe x4, faster read/write speed than SATA
- Special design NVMe heatsink with thermal pad, compatible with different NVMe for heat dissipation
- Supports four GbE LAN, each with dedicated PCIe lane
- Supports Intel® i350 PoE capability with programmable power on/off control
- Compatible with MIC Regular FIO, i-Module, and Advantech iDoor

### Introduction

The new Advanced Flex I/O Series is designed to support more I/O and superior functionality while keeping the advantages of the MIC-7 series: compact, fanless design, and a wide-operating temperature range.

MIC Flex I/O, such as the HDMI/DVI kit, MIC i-Module to add the PCIe/PCI card, and Advantech iDoor can still be supported by the MIC-7 series when Advanced Flex I/O is added. Additional modular expansion options satisfy an array of requirements. The series is suitable for machine vision, factory automation, and IEM deployment.

### Specifications

| Part Number             | 98910770301                                                                         | 98910770401                                                                          | 98910770501                                                                           |
|-------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Picture                 |  |  |  |
| Support Model           | MIC-770*                                                                            | MIC-770*                                                                             | MIC-770*                                                                              |
| Function                | NVMe M.2 + 4x GbE LAN                                                               | NVMe M.2                                                                             | 4x GbE PoE                                                                            |
| Interface               | B/B Connector                                                                       | B/B Connector                                                                        | B/B Connector                                                                         |
| Signal                  | 1 x PCIe x4 for NVMe<br>4 x PCIe x1 for 4 x LAN<br>LPC for TPM2.0 module            | 1 x PCIe x4 for NVMe<br>LPC for TPM2.0 module                                        | 1 x PCIe x4 for Intel® i350                                                           |
| NVMe Spec.              | M.2 2280, M-Key                                                                     | M.2 2280, M-Key                                                                      | -                                                                                     |
| Ethernet Controller     | 4 x Intel® i210                                                                     | -                                                                                    | 1 x Intel® i350                                                                       |
| LAN Speed               | 10/100/1000 Mbps                                                                    | -                                                                                    | 10/100/1000 Mbps                                                                      |
| Operating Temperature   | -10 ~ 50 °C**                                                                       | -10 ~ 50 °C**                                                                        | -10 ~ 40 °C**                                                                         |
| PoE Output Power        | -                                                                                   | -                                                                                    | Total 40W<br>802.3.af PoE Compliant                                                   |
| PoE On/Off Control      | -                                                                                   | -                                                                                    | ✓                                                                                     |
| Heatsink                | NVMe M.2                                                                            | NVMe M.2                                                                             | Intel® i350                                                                           |
| Regular MIC FIO Support | Compatible***                                                                       | Compatible***                                                                        | -                                                                                     |

\* Only support by MIC-770 V1 Q SKU and MIC-770 V2 W SKU

\*\* Test with 35W TDP CPU (with 0.7m/sec air flow)

\*\*\* AHS-DIO32-00A1E and 9891790040E cannot be supported.

### Ordering Information

| Part Number | Description                      |
|-------------|----------------------------------|
| 98910770301 | 98910770301 MIC NVMe + 4 LAN FIO |
| 98910770401 | 98910770401 MIC NVMe FIO         |
| 98910770501 | 98910770501 MIC 4 PoE FIO        |

## Flex I/O Introduction

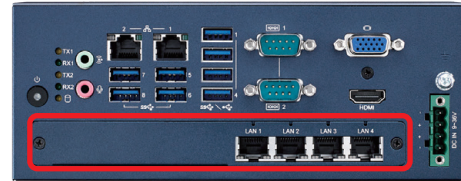
Example: MIC-770 (default)



Small FIO

Regular FIO

Example: MIC-770 + 98910770501

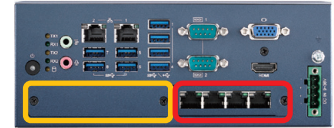


Advanced Flex I/O

## Flex I/O Assembly Example



Default MIC-770



After Assembly

Advanced Flex I/O  
NVME + 4x LAN



Default MIC-770



After Assembly

**Note 1:** Please visit Flex I/O product page for more information of Regular Flex I/O

**Note 2:** Regular Flex I/O will move to the left once Advanced Flex I/O is assembled

Advanced Flex I/O  
NVME + 4x LAN

Regular Flex I/O  
DVI



Default MIC-770



After Assembly

Advanced Flex I/O  
4x PoE

**Note:** Regular Flex I/O cannot be added together with PoE Flex I/O