MIC-75G20

GPU Expansion Module for AI Edge Computing with MIC-7000 Series

Features

- Offering powerful GPU solution with nVIDIA 250W, 2-slot width/285mm length GPU cards for new AI application
- Dual 24V_{DC} power inputs with reliable power and OCP solution for up to 600W maximum peak power currency
- Intelligent power status indicating LED for system and GPU card independently
- Versatile wall-mount, table-mount, suitable for any industrial environment deployed
- Dual front accessible storage bay for easy swap
- Up to 40°C op. temp., 0.5 Grms op. vibration
- IP30 rating with fan filter, suitable for outdoor or industrial environment
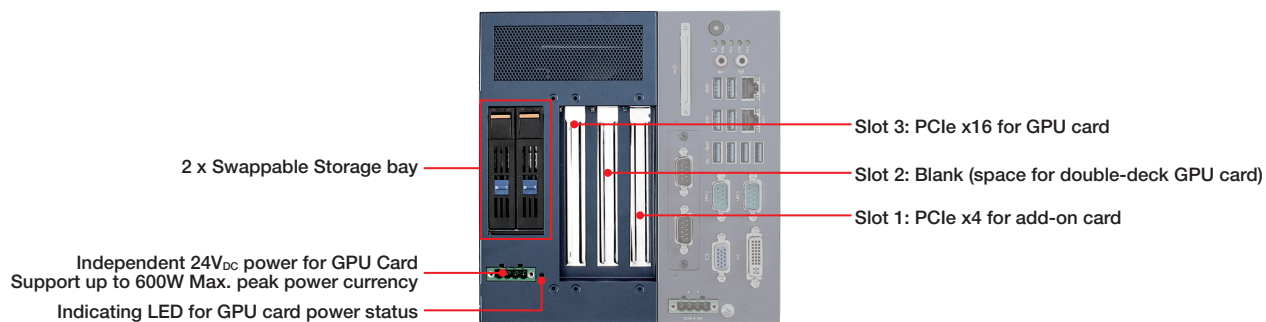- Compact size design

Introduction

MIC-75G20 supports nVIDIA double-deck high performance 250W GPU cards. Robust power design ensures system and GPU card's reliability under high power consumption scenario.
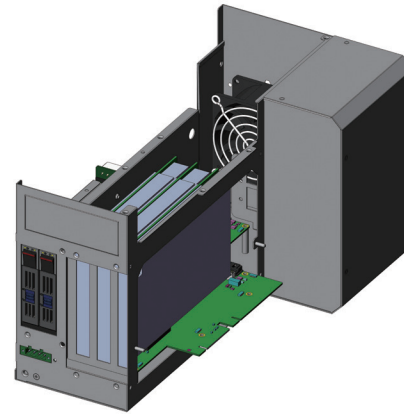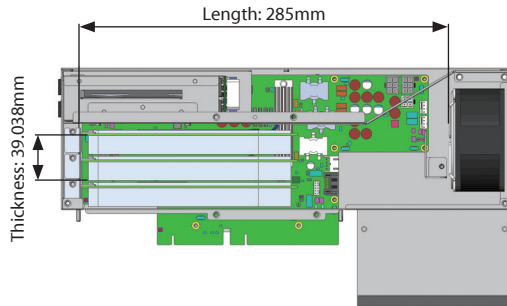
Specification

Expansion slot	Slot 1: PCIe x4, Slot 2: blank, Slot 3: PCIe x16
SATA Connector	1 x SATA Signal, 1 x SATA Power
Storage	2 x 2.5" swappable storage bay
Power	Input: Dual 24 V_{DC} (one on MIC-7000 system, one on MIC-75G20)
	Power consumption: Typical: 334.63W (Tested with GTX-1080Ti with MIC-7700Q)
	Power solution supports up to maximum 600W (Tested with GTX-1080Ti's peak power consumption)
	2 x 6-pin Conn. for GPU card (12V_{DC}, 17A for each Conn.)
	1 x 4-pin Conn. for add-on card (12V_{DC}, 5A)
GPU Card Dimension	Thickness: 39.038mm (standard 2-slot), Length: 285mm
LED	1x indicating LED of MIC-75G20 power status
Enviroment	Operating Temp.: 0~40 °C (35W CPU w/ industrial SSD)
	Vibration: With SSD: 0.5 Grms @ 5~500 Hz, randon, 1 hr/axis
	Shock: With SSD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration
Mechanical	MIC-75G20 N.W. 2.99 kg; G.W.: 4.79 kg
	Dimension (W x H x D): 110 x 192 x 350 mm
Fan	1x 8025 cooling fan embedded (4500RPM, 57CFM)

Front View

2 x Swappable Storage bay

Independent 24V_{DC} power for GPU Card
Support up to 600W Max. peak power currency

Indicating LED for GPU card power status

Slot 3: PCIe x16 for GPU card

Slot 2: Blank (space for double-deck GPU card)

Slot 1: PCIe x4 for add-on card

ADVANTECH Modular IPCs

All product specifications are subject to change without notice.   Last updated: 30-Jan-2019

GPU Card Dimension Guide

Length: 285mm

Thickness: 39.038mm

Ordering Information

Part Number	Description
MIC-75G20-00A1	GPU card expansion i-Module with 1 PCIe x16, 1 PCIe x4, 2x 2.5" swappable storage bay

Packing List

Part Number	Description	Quantity
1652003234	4-pin phoenix connector	2
1700017838	SATA cable (30cm)	1
1700020978-01	SATA cable (40cm)	1
1700024985-01	HDD BP power cable	1
1700023022-01	GPU power cable (6 to 6/8 Pin)	2
1960070543T001	Mounting bracket (I-type)	1
1960070545N001	Mounting bracket (C-type)	1
1930007259-01	Screw for mounting bracket	4
20415G2000	MIC-75G20 Start-up manual	1

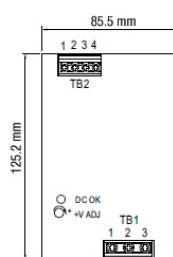# Optional Accessories

Part Number	Description
96PSD-A480W24-MN*	480W PSU
1700029474-01	PSU Y-type cable (1.5M)
1700029720-01	PSU power cord (USA) UL/CSA (1.83M)
1700022074-11	4-pin 12V$_{DC}$ power cable (40cm)
96VG-NR2070F16-6D	LEADTEK RTX2070 8G HDMI+3*DP+DVI-D
96VG-NR2080F16-6M	LEADTEK RTX2080 8G HDMI+3*DP+USB-C

* Recommend to use for powering MIC-75G20 + MIC-7000.

Power Supply Cabling Guide

PSU power cord
(1.83M)
P/N: 1700029720-01

Y-Type cable
P/N: 1700029474-01

PSU pin-out

85.5 mm

125.2 mm

TB2 pin-out (for Y-type cable)

Pin No.	Assignment
1, 2	DC OUTPUT +V
3, 4	DC OUTPUT -V

TB1 pin-out (for PSU power cord)

Pin No.	Assignment
1	FG ⏚
2	AC/N or DC-
3	AC/L or DC+

Y type cable

Connect from PSU to the MIC-7000 and MIC-75G20 via optional PSU Y-cable with 2x 4-pin phoenix connector (1652003234)

Mounting Type and Dimensions

(Example: MIC-7700 + MIC-75G20)