

# ISP-MIC717-NVRA1

## AI NVR on NVIDIA Jetson Platform for Smart Space



### Features

- Leverages AI platforms based on the NVIDIA® Jetson Orin™ NX, with the latest JetPack 6.0.
- Build in NVIDIA's deep learning AI-based video analytics, such as object detection, face recognition, and license plate recognition.
- Users can remotely access and manage the NVR system through web service and mobile app.
- Supports 8 PoE ports, and monitors 8 x video streams in real time on web service.
- Suitable for Smart space applications such as smart city, and smart retail.

### Description

Integrated Solution Packages (ISP) are AI platforms based on the NVIDIA® Jetson Orin™ Series, with pre-installed SDKs compatible with JetPack 6.0 and above. These ISP integrate both hardware and software to allow users to develop applications more quickly than before. After powering on the device, users can follow the ISP setup SOP to complete steps such as booting, installation, and activation. The software's recognition accuracy can be fine-tuned according to different application scenarios, enabling rapid deployment of edge AI.

AI NVR is a powerful and flexible solution that helps users build AI-powered intelligent video analytics applications. With its rich features, users can manage and analyze video data more effectively, thereby enabling various intelligent application scenarios.

### Specifications

|                  |                        |   |
|------------------|------------------------|---|
| System Platform  |                        | MIC-717-0X4A1   |
| Processor System | CPU                    | 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU (2 MB L2 + 4 MB L3)   |
|                  | GPU                    | 1024-core NVIDIA Ampere GPU with 32 Tensor Cores  |
|                  | Memory                 | 16 GB 128-bit LPDDR5  |
| I/O              | Ethernet               | 2 x 10/100/1000 Mbps  |
|                  | Display                | 1 x HDMI (Max. resolution 3840 x 2160p @60Hz)   |
|                  | USB                    | 2 x USB 2.0   |
|                  | Digital I/O            | 4-ch DI, 4-ch DO  |
|                  | PoE + Ports            | 8 x RJ-45 (10/100 Mbps + PoE / total power: 123.2 W)  |
| Expansion        | M.2                    | 1 x M.2 3042 (B-Key, signal: USB)   |
|                  | SIM                    | 1 x Nano SIM slot   |
|                  | TPM                    | 1 x TPM 2.0   |
| Storage          | M.2                    | 1 x M.2 2280 (M-Key, NVMe, signal: PCIe x4)   |
|                  | HDD/SSD                | 1 x 3.5" HDD or 1 x 2.5" SSD  |
| Power            | Power Supply           | adapter (external)  |
|                  | Input Voltage          | 54 V DC, 4.26 A   |
| Environment      | Operating Temperature  | 0 ~ 50°C (32 ~ 122°F)   |
| Mechanical       | Dimensions (W x D x H) | 254.5 x 195.0 x 44.45 mm (10.0" x 7.67" x 1.75")  |
|                  | Weight                 | 1.14 kg (2.5 lb)  |
|                  | Installation           | Desktop / Wall mount  |
| Certifications   |                        | UL, cUL, CE, UKCA, RoHS, Reach (SVHC)   |
| BSP              |                        | Above JetPack 6.0   |
| Build-in SDK     | AI NVR                 | DeepStream v7.0<br>CUDA v12.2<br>cuDNN v8.9.4<br>TensorRT v8.6.2.3<br>OpenCV v4.8.0<br>AI-NVR v1.1.0<br>NVStreamer v1.1.0 |

## Specifications (Cont.)

|                |  |   |
|----------------|--|---|
| Demo Scenario  | Office building monitoring for people counting with PeopleNET model. |   |
| Functions      | Web Services   | <ul style="list-style-type: none"> <li>▪ Camera review and management</li> <li>▪ Video wall for monitoring 8 streams in real time</li> <li>▪ Live streaming AI analytic for people counting</li> <li>▪ Manage and set ROI and tripwire</li> </ul> |
|                | Android Mobile app   | <ul style="list-style-type: none"> <li>▪ Multiple camera view</li> <li>▪ Analytics setup &amp; data dashboard</li> <li>▪ Real time alerts</li> <li>▪ ROI and tripwire setting</li> </ul>  |
|                | AI Analytics   | <ul style="list-style-type: none"> <li>▪ PeopleNET 2.6</li> <li>▪ People Counting: Tripwire/ROI</li> </ul>  |
| Latest Version | Ver 1.0  |   |

## Ordering Information

| P/N              | Description  |
|------------------|--|
| ISP-MIC717-NVRA1 | AI platform Based on NVIDIA® Jetson Orin™ NX 16GB, JetPack 6.0, pre-install AI NVR SDK |

## Accessories

| P/N              | Description                  |
|------------------|------------------------------|
| XAC-FSP230-AWAN3 | ADP A/D 100-240 V 230 W 54 V |
| 1702002600-01    | Power cord (USA)             |
| 1702002605       | Power cord (EU) 2-pin        |