

UNO 2025 Q2 Product Roadmap

ISG, Industrial IoT
UNO Division



Edge Computing Key Strategy Areas

Sector-driven Technologies Elevating Application-focus Edge Computing

Focused Market

Smart Manufacturing



Semiconductor



Robotics



Edge AI



Real-time

EtherCAT Edge Controller

Codesys/ Hypervisor

Optimized BIOS/Firmware/OS
Setting

IT/OT Edge Gateway

Edge Device Connectivity

Edge to Cloud

Edge AI Computing

Latest Intel/AMD CPU Technology

NVIDIA GPU Computing System

Vision Integrated System

Equipment Redundancy Solution

Application
-focus
Edge
Computing

IEC 62443-4-2 & CRA Compliance



Equipment Edge

- 15th Gen Intel Core Ultra CPU
- Semicon IPC for Equipment Redundancy
- Autonomous Robot Controller



Control Edge

- Real-time EtherCAT Controller
- Edge Computer/ Gateway with Device Connectivity & Fieldbus Conversion



HMI Edge

- All-in-One HMI with Slim-Bezel
- Modular HMI
- Cybersecurity Certified HMI
- Arm System Ready Compliance



Vision Edge

- Comprehensive Frame Grabber Solutions
- High-speed Imaging with GPU DMA



GPU Edge

- Blackwell RTX Series (High-end GPU)
- Edge Inferencing with GPU Computing Capability

Partner
Engagement

• Silicon Partners    

• Cloud/OS Partners



ADVANTECH

Advantech Industrial Edge Platform

Ideal for diverse edge computing applications that bridging OT to IT seamlessly

Machine Builder

Equipment Facility

Factory Automation

Building Automation

Public Utility

Oil & Gas



Machine
Control



Protocol
Conversion



Visualization



Predictive
Maintenance



Data
Analytics



EdgeSync 360

EdgeLink

WISE-DeviceOn



Microsoft Azure



UNO-100

UNO-300

M2I Control Edge



UNO-2000

Industrial Computing Edge



UNO-400

UNO-200

Application-Oriented Edge

UNO Edge Computer selection guide

Reliability

Highest

Real-time Control Edge

Hypervisor

Edge AI Computing

Control Edge

UL 61010

OT



UNO-127 series
Intel Atom (5W-7W)



UNO-137 series
Intel Atom (5W-12W)



UNO-148 series
Core i U series (15W)

IT-OT

IT/ OT Edge Computer/ Gateway

Think Client



UNO-2271 series
Intel Atom (5W-7W)



UNO-2372 series
Intel Atom (7W-10W)



UNO-2484 series
Core i U series (15W)

IOT Edge

UL 62368

IT



UNO-247 series
Intel Atom (5W-10W)



UNO-238 series
Core i U series (15W)



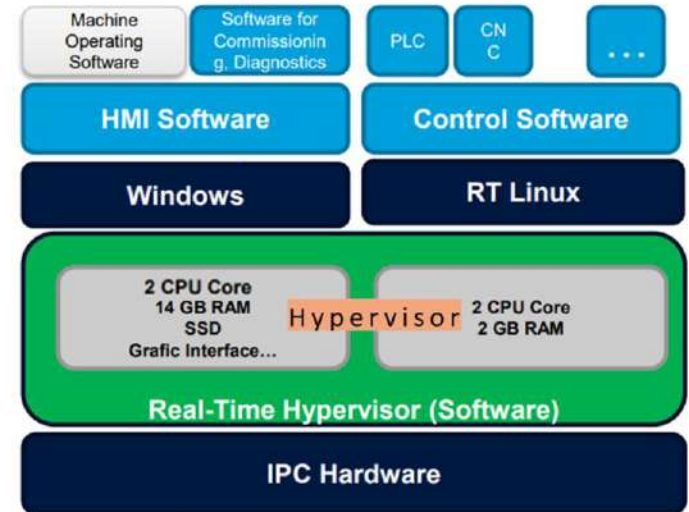
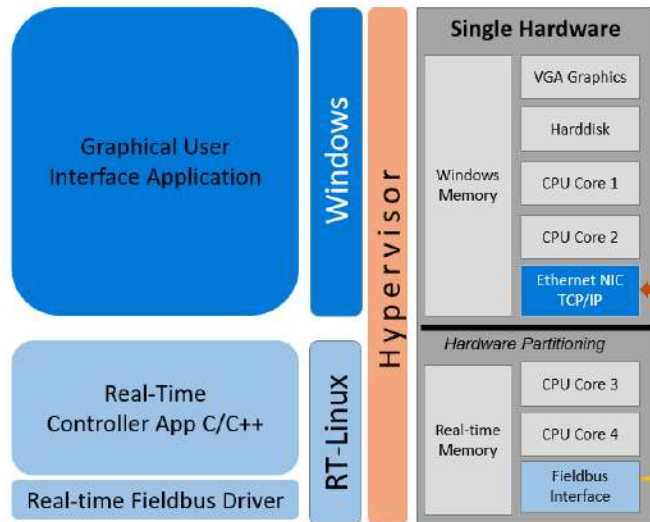
High Price

Control Edge for Real-time application

- 1 Optimized RT performance (via BIOS/OS/Driver fine tuning)
- 2 Components selected for real-time performance (Intel NIC, -RE processor line)
- 3 Soft PLC and Real-time EtherCAT Control Optimization Service



Ether**CAT**



Real-time Hypervisor: Windows + Real-time Linux

IT/OT Edge Computer/Gateway



AI module integration In UNO

Performance

High



UNO-148

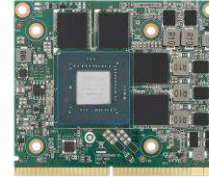


UNO-MXM Extension



NVIDIA
NVIDIA® A1000

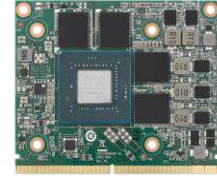
Restnet_50 3024 FPS



SKY-MXM A1000 (35W)

NVIDIA
NVIDIA® A2000

Restnet_50 4803 FPS



SKY-MXM 2000A (35W)



MIC-711

NVIDIA® Jetson Orin™ Nano

40 TOPS
Restnet_50 959 FPS



Edge AI Computing



UNO-137 V2



UNO-148 V2

HAILO
1x Hailo-8™

26 TOPS
Restnet_50 1328 FPS



Low

Low

ResNet-50 is a deep convolutional neural network with 50 layers benchmark

High

Price

UNO New Product Launch and Development Timeline_I

2024

Q2

UNO-148 V2

Intel® 13th Gen Core™ (15W)
Platform



MP

UNO-MXM-CB01

MXM Carry Board
Type A (35W)



MP

2025

Q1

UNO-2271 V3

Amston Lake Industry Dual Core



UNO-247 V2

Amston Lake – Quad Core



2026

Q1

UNO-2372 V3

- > Intel Twin Lake Quad Core (9-12W)
- > 432C panton/ Slim/ Fanless Design
- > 2nd stack for IDoor

UNO-2484 V3

- > Intel 15th Gen Core I (15W)
- > 432C Panton/ Slim/ Fanless Design
- > 2nd stack for IDoor

Q3

UNO-3283/5 V2

- > Intel 15th Gen Core I (25W)
- > Expansion Slot System
- > HDD swappable design

Available Developing Planning

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ADVANTECH

iDoor New Product Launch and Development Timeline

2024

Q3

PCM-34R1TP

I226 2.5G LAN

M.2 B+M key (3042)



MP

PCM-34R2GL

I350 Dual GbE

M.2 B+M key (2242)



MP

2025

Q1

PCM-34D2RX

Dual Series Port

Isolated

M.2 B key (2242/2280)



PCM-34D4RX

Quad Series Port

DB37 Port

M.2 B key (2242/2280)



PCM-37D24DI

16DI, 8 DO, PCIE

M.2 B+M Key (3042.3080)



2025

Q3

PCM-3300MR

MRAM, 2 MB

M.2 B key (PCIe)



Available

Developing

Planning

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UNO Roadmap

UNO-1 Automation Control Roadmap

Available Developing Planning



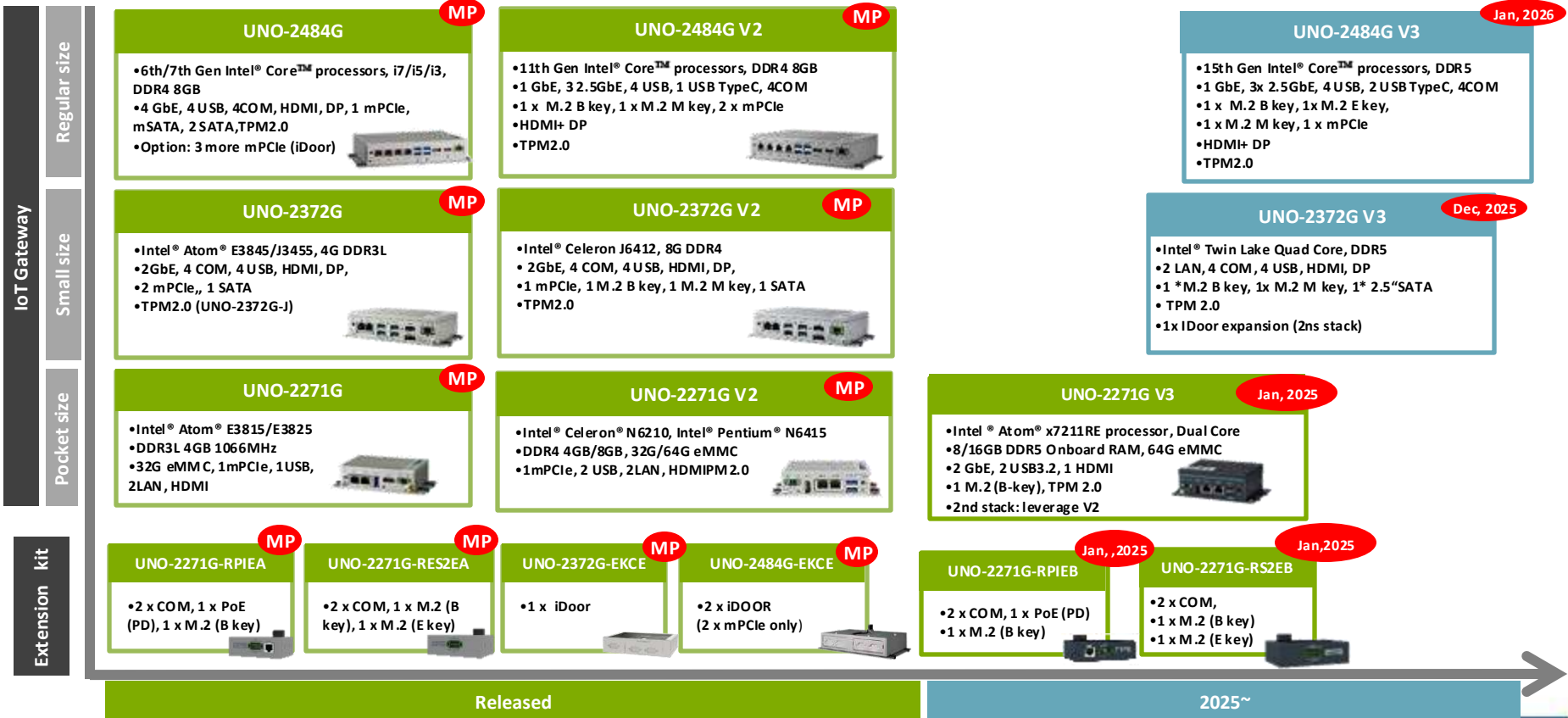
Positioning



UNO-2 Industrial Edge gateway/ Edge Computer Roadmap

Positioning

Available Developing Planning



UNO-2 IoT Gateway Edge Roadmap

Positioning

Available Developing Planning

Modular Design

Extension kit

UNO-238

MP

- 8th Gen Intel® Core™ processors
- 12V Lockable DC in
- 2 x LAN, 4 x USB, 2 x COM
- 1 x HDMI, 1 x DP, 1 x GPIO, 32G eMMC



UNO-238 V2

MP

- 12th Gen Intel® Core™ processors
- 24V Terminal block
- 2 x LAN, 4 x USB, 2 x COM, 2 x CAN, 1 x HDMI,
- 1 x DP, 1 x GPIO, 2 x USB type C



UNO-247

MP

- Intel® Celeron processor J3455
- 12V Lockable DC IN
- 2GbE, 6 COM, 4 USB, HDMI, VGA, 1 x M.2, 1 mPCIe, 1 SATA, 1 mSATA



UNO-247 V2

Jan, 2025

- Intel® ADL-N97 Quad Core, DDR5
- 4 LAN, 6 COM, 4 USB, HDMI, VGA, 16 bit GPIO
- 1 * M.2 B key, 1* 2.5" SATA
- 12 / 24V DCIN (Terminal)
- 1x IDoor expansion



WISE-710

MP

- iMax 6 DualLite, 1G DDR3
- 2xLAN, 4DI/4DO, 1 x RS485/CAN, 1 x RS232/485, 1 x RS485
- 8G eMMC, 1 x micro SD, 1x micro USB



UNO-220-P4N1

MP

- Industrial kit for Raspberry Pi 4
- 4 x GPIO
- 1 x RS-232/RS485



Note: Raspberry Pi 4 is excluded in the kit

UNO-220-P4N2

MP

- Industrial kit for Raspberry Pi 4
- 8 x GPIO
- 1 x RS-232/RS485
- POE Function/ TPM onboard



Note: Raspberry Pi 4 is excluded in the kit

Released

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UNO-3 Integrated Edge IPC Roadmap

Available Developing Planning

Positioning

Core i

UNO-3285G

MP

- Intel® Core™ 6th Gen core i7/i5/i3, DDR4 8GB
- iDoor, 2 GbE, 6 USB, 2 COM, DVI, HDMI
- 4 slot (2 PCIeX8 + 2 PCI)
- Dual power input, hot swappable HDD



UNO-3283G

MP

- Intel® Core™ 6th Gen core i7/i5/i3, DDR4 8GB
- iDoor, 2 GbE, 6 USB, 2 COM, DVI, HDMI
- 2 slot (PCIeX16 + PCI)
- Dual power input, hot swappable HDD



UNO-3272G

MP

- Intel® Celeron J1900, DDR3L 4GB
- iDoor, 2 GbE, 4 USB, 4 COM, VGA, HDMI, TPM2.0
- 2 slot (2 PCIeX1)



UNO-348

MP

- Intel® 10th Core i5, i9, DDR4 8/16GB,
- 3 GbE, 6 USB, 3 COM, DP, HDMI, TPM2.0
- 1 M.2 B key for SSD/LTE, 1 mPCIe
- SKU Options:
 - 1 expansion slot (1 *PCIex16)
 - 3 expansion slot (1 *PCIex16, 2 *PCI)



UNO-3283/5

Q4, 2025

- Intel® Core™ 15th Gen core i7/i5/i3, DDR4 16GB
- iDoor, 3 GbE, 6 USB, 2 COM, DP, HDMI
- 4 slot (2 PCIeX8 + 2 PCI) / 2 slots (PCIe*8+PCI)
- Dual power input, hot swappable HDD
- GND Isolation



Released

2025~

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iDoor Roadmap

iDoor Modules - mPCIe

• Industrial I/O & Peripheral



PCM-2300MR

MRAM, 2 / 4 MB, mPCIe



PCM-23C1CF

1 CFast Slot
with Cover Protection



PCM-23U1DG

USB Slot
w/ Lock for USB Dongle



PCM-24U2U3

2 ports USB 3.0,
mPCIe, USB Type-A

• Smart I/O & Communication



PCM-24D2R4

2-Port Isolated RS-422/485
mPCIe, DB9



PCM-24D2R2

2-Port Isolated RS-232
mPCIe, DB9



PCM-24D4R4

4-Port Non-Isolated
RS-422/485,
mPCIe, DB37 cable



PCM-24D4R2

4-Port Non-Isolated RS-232
mPCIe, DB37 cable



PCM-27D24DI

24-Channel Isolated
Digital I/O w/ counter,
mPCIe, DB37

• Industrial Fieldbus

CANopen



PCM-26D2CA

2-Port Isolated
CANbus mPCIe,
CANopen, DB9

PROFIBUS



PCM-26D1DB

1-Port Hilscher netX100
Field Bus mPCIe,
PROFIBUS, DB9

PROFINET



PCM-26R2PN

2-Port Hilscher netX100
Field Bus mPCIe,
PROFINET, RJ45

EtherCAT



PCM-26R2EC

2-Port Hilscher netX100
Field Bus mPCIe,
EtherCAT, RJ45

EtherNet/IP



PCM-26R2EI

2-Port Hilscher netX100
Field Bus mPCIe,
EtherNet/IP, RJ45

• Wire Communication



PCM-24R1TP

1-Port Gigabit Ethernet,
Intel® I225, 2.5Gb/s, TSN,
mPCIe, RJ45



PCM-24R2PE

2-Port Gigabit Ethernet,
IEEE 802.3af (PoE) Compliant,
mPCIe, RJ45*2



PCM-24R2GL

2-Port Gigabit Ethernet,
Intel® I350,
mPCIe, RJ45*2

• Wireless Communication



PCM-24S2WF

Wi-Fi 802.11 a/b/g/n 2T2R
w/Bluetooth 4.0,
half-size mPCIe, antennas



PCM-24S34G

LTE/HSPA+/GPRS and GPS,
full-size mPCIe,
4G/GPS antennas

• Accessories



PCM-28P1AD

PCIe to mPCIe, 2-slot mPCIe,
iDoor I/O plate expansion



PCM-28P1BK

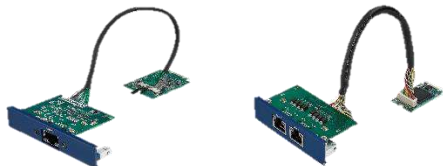
iDoor PCIe I/O plate

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iDoor Modules – M.2

- Wire Communication



PCM-34R1TP

1-Port Gigabit Ethernet,
Intel® I225, 2.5Gb/s, TSN,
M.2 (3042, B+M key, PCIe),
RJ45

PCM-34R2GL

2-Port Gigabit Ethernet,
Intel® I350,
M.2 (2242, B+M key, PCIe),
RJ45*2

- Smart I/O & Communication



PCM-34D2R4

2-Port Isolated RS-422/485
M.2 (2242, B key, USB),
DB9

PCM-34D2R2

2-Port Isolated RS-232
M.2 (2242, B key, USB),
DB9

PCM-34D4R4

4-Port Non-Isolated
RS-422/485,
M.2 (2242, B key, USB),
DB37 cable

PCM-34D4R2

4-Port Non-Isolated RS-232
M.2 (2242, B key, USB),
DB37 cable

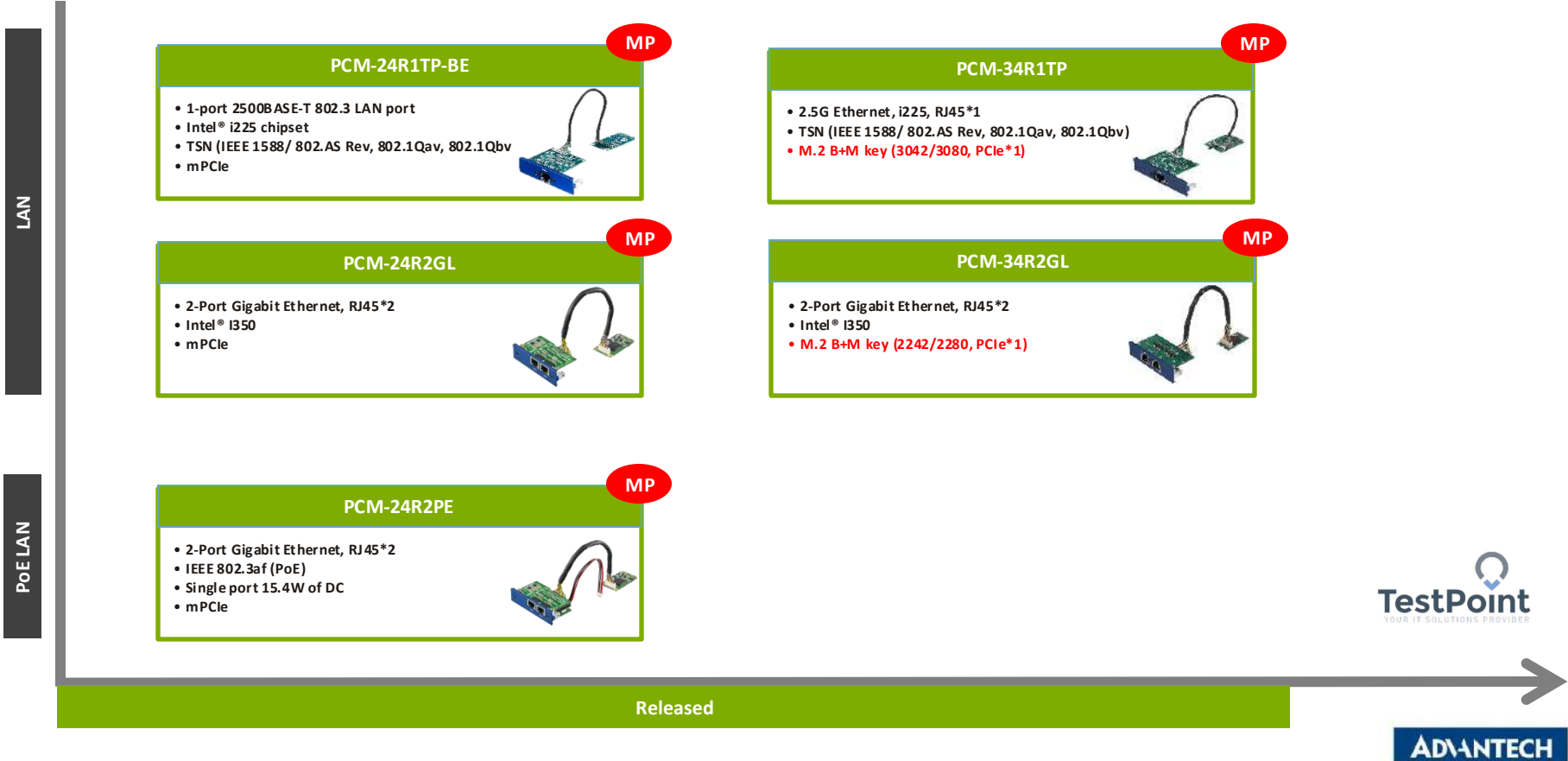
PCM-37D24DI

24-Channel Isolated
Digital I/O w/ counter,
M.2 (3042, B key, USB),
DB37

iDoor Roadmap I

Available

Positioning



iDoor Roadmap II

Available Developing

Positioning

Near-Field I/O

PCM-27D24DI

MP

- Iso. 16DI, 8DO
- Iso. Protection 2.5k Vdc
- mPCIe



PCM-37D24DI

Q1,2025

- Iso. 16DI, 8DO
- Iso. Protection 2.5k Vdc
- M.2 B+M Key (3042/3080, PCIe*1)



PCM-24D2Rx

MP

- 2 port USB type mini card
- Isolation RS-232, 422/485
- DB9 *2
- mPCIe



PCM-34D2Rx

Q1,2025

- 2 port USB signal mini card
- Isolation RS-232, 422/485
- DB9 *2
- M.2 B Key (2242/2280, USB)



PCM-24D2Rx

MP

- 4 port USB type mini card
- Non-Isolation RS-232, 422/485
- DB37 cable
- mPCIe



PCM-34D4Rx

Q1,2025

- 4 port USB signal mini card
- Non-Isolation RS-232, 422/485
- DB37 cable
- M.2 B Key (2242/2280, USB)



Released

2025

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Serial communication



Co-Creating the Future of the IoT World

