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We point out that all used brand names refer to the general brand, trademark or patent protection of the respective company or facility. Subject to change.



## Pi-Tron based on Raspberry Pi

- Solution for Industrial Products

As Raspberry Pi Design Partner we support you with our expertise in the development of new Raspberry Pi product designs.

> WLAN/Bluetooth® connectivity

➤ 4x Arm® Cortex®-A72 @1.5 GHz

➤ Suitable for CODESYS® SoftPLC

> 2x USB 2.0 Host, 2x LAN, RS232.

111 x 25 x 76 mm for mounting on

RS485, CAN FD, 4x DIO

> Stainless steel housing

35 mm mounting rail

DL 7" Pi-Tron CM4

> 3D Video Engine

450 cd/m<sup>2</sup>

Cortex®-A72 @1.5 GHz

➤ Broadcom BCM2711, 4x Arm®

→ 7" IPS-Display, 1024 x 600 Pixel

➤ Aluminium Front, PCAP Multitouch

> Optional WLAN/Bluetooth®

➤ 1 GB RAM up to 8 GB LPDDR4-RAM

> Residential and industrial

applications

**BL Pi-Tron CM4** 

Available until 2034

AL Pi-Tron CM4

- > State of the art computing power
- Industrial-use interfaces, customizable

#### **BL Pi-Tron CM5**

- ➤ Broadcom BCM2712 4x Arm® Cortex®-A76 @2.4 GHz
- > 2 GB up to 8 GB LPDDR4-RAM
- ➤ Optional WLAN/Bluetooth
- ➤ Available until 2036

#### **BL Pi-Tron CM3+**

- > 4x Arm<sup>®</sup> Cortex<sup>®</sup>-A53 @1.2 GHz
- ▶ 1 GB RAM, up to 32 GB eMMC
- > Fanless operation
- ➤ Suitable for CODESYS® SoftPLC
- > Available until 2030

#### AL Pi-Tron CM3+

- > 2x USB 2.0 Host, 2x LAN, RS232, RS485, CAN, 4x DIO
- ➤ Stainless steel housing 111 x 25 x 76 mm for mounting on 35 mm mounting rail

# PiXtend®

#### - First choice for Industrial Projects

- ➤ PiXtend® controllers and PiXtend® eIO modules reduce your time-to-market
- Based on a single-board computer from the Raspberry Pi Foundation Pi4 or 3B+

# PiXtend® V2-L- Pi 4 & PiXtend® V2-L-

- Brushed stainless steel DIN rail housing
- ▶ 16x DI, 12x DO, 6x AI, 2x AO, 4x Relais, 6x PWM, 4x GPIO
- ➤ Retain memory 64 Byte Flash EEPROM
- ➤ Suitable for CODESYS® SoftPLC

# PiXtend® V2-S- Pi 4 & PiXtend® V2-S-

- Brushed stainless steel DIN rail housing
- 8x DI, 4x DO, 2x AI, 2x AO, 4x Relais, 4x PWM, 4x GPIO
- Retain memory 32 Byte Flash EEPROM
- ➤ Suitable for CODESYS® SoftPLC

# PiXtend® elO Digital One Pro

C or Python

- > 8x 3.3 / 5 / 12 / 24 V, digital input including counter function
- ➤ 8x 0,5 A, 5 / 12 / 24 V, digital output

> Programmable in common

programming languages such as

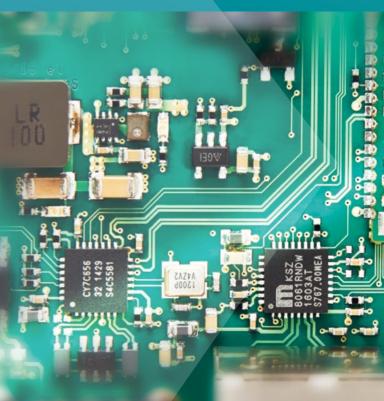
➤ Suitable for CODESYS® SoftPLC

➤ Fast digital logic "HyperLogic"

#### PiXtend® eIO Analog One Pro

- ➤ 4x 0...5 V / 0...10 V, analog 10-Bit voltage inputs (AI-U)
- ★ 4x 0...10 V, analog 12-Bit voltage outputs (AO-U)
- ➤ 2x 0...20 mA, analog 12-Bit current outputs (AO-I)
- 4x 0...20 mA, analog 10-Bit current inputs (AI-I)

# We IoT-ize your Business





# System-on-Module

- OSM-S Family



- > Directly soldered without plug connectors
- > Fully automated assembly and test
- Manufacturer independent
- > Future proof open standard







### **Automation-Line**

- Proven & Robust



- > CODESYS® ready
- > Flexible interfaces
- > Easy adaptation to costumerspecific requirements
- Compact, fanless all-in-one solution

■ i.MX6 ULL 1x Arm® Cortex®-A7

4 GB eMMC. microSD-Card Slot

111 x 25 x 76 mm for mounting on

> 512 MB RAM, 512 MB NAND.

> Stainless steel housing

35 mm mounting rail

➤ High-quality visualization

> Scalable from low-power

> Various customization options

to high-performance

> Long-term availability

#### Secure & Connected



← KontronOS & ← K-PORT

AL i.MX6 ULL

@800 MHz

> 24 V Input





From the idea to the development of a product ready for the market - our

team is there to support you. Many years of development experience and





Mechanics

**Product** 

# Industrialization

#### **Production**



Expertise





Certification



Final Assembly

Services

#### **CPU-Boards** OSM-S i.MX8M Plus

- GPU and NPU M4, GPU
- > 2x 1 Gbit/s (1x with TSN). 2x USB 3.0. 2x CAN FD
- ➤ MIPI DSI, LVDS, HDMI, 2x MIPI CSI
- ➤ CODESYS® SoftPLC support

#### OSM-S i.MX93

- M33. microNPU
- > 2x 1 Gbit/s (1x with TSN), 2x USB 2.0 OTG, 2x CAN FD

#### OSM-S i.MX8M Mini

- ➤ 1x 1 Gbit/s
- ➤ MIPI DSI. 1x MIPI CSI
- ➤ CODESYS® SoftPLC support

- > 2x Arm® Cortex®-A55.
- MIDI DSI, LVDS, 1x MIPI CSI

# System-on-Module

#### - Powerful & Compact

- ➤ Short development cycle
- Reduced engineering risks
- ➤ EMC tested
- ➤ Long-term availability of CPU module

#### SL i.MX6 ULL/UL

- i.MX6 ULL 1x Arm® Cortex®-A7 @800 MHz
- ➤ i.MX6 UltraLite 1x Arm® Cortex®-A7 @528 MHz
- > 2x 10/100 Mbit/s. 1x PHY included, 2x CAN 2.0 B
- ➤ CODESYS® SoftPLC support

#### > 4x Arm® Cortex®-A53.

**SL STM32 MP157** 

> 1x 10/100 Mbit/s.

MIPI DSI, RGB 24 Bit

> 2x Arm® Cortex®-A7

> 1x Arm<sup>®</sup> Cortex<sup>®</sup>-M4 @200 MHz

1x PHY included, 1x CAN FD

#### **BL i.MX8M Plus**

> Fast time to market

▶ 1 – 4 GB RAM. 8 – 64 GB eMMC. microSD-Card Slot

▶ Reduced development effort

> Scalable computing power

- Efficient & Independent Platform

- > 2x USB 2.0, 2x GBE, RS232, RS485, CAN, 4x DIO
- ➤ HDMI, LVDS, CSI, I<sup>2</sup>C/USB Touch
- ➤ Suitable for CODESYS® SoftPLC

#### **BL i.MX8M Mini**

- ▶ 1 4 GB RAM. 8 64 GB eMMC. microSD-Card Slot
- > 2x USB 2.0 Host, 1x Gbit/s, 1x 10/100 Mbit/s. RS232. RS485. CAN. 4x DIO
- ➤ HDMI, LVDS, I<sup>2</sup>C/USB Touch
- ➤ Suitable for CODESYS® SoftPLC

#### Industrial connectors/ 24 V DC Input

> Wide range of applications

#### BL i.MX93

- 1 − 2 GB RAM, 4 − 64 GB eMMC, NPU
- microSD-Card Slot
- > 2x USB 2.0 Host, 1x USB 2.0 Typ-C UFP, 2x GBE, RS232, RS485, CAN FD. 4x DIO
- > LVDS, MIPI CSI, I<sup>2</sup>C/USB Touch
- ➤ Suitable for CODESYS® SoftPLC

#### **BLi.MX6 ULL**

- > 512 MB RAM, 512 MB NAND. 4 GB eMMC. microSD-Card Slot
- > 2x USB 2.0 Host, 2x 10/100 Mbit/s, RS232, RS485, CAN, 2x DIO, 2x AIN
- > RGB. I<sup>2</sup>C/USB Touch
- ➤ Suitable for CODESYS® SoftPLC

The SoM in combination with the Linux BSP and a complete development environment, offers an immediately deployable system which can be used for various applications. Develop your own baseboard based on the SoM module. Gladly we develop the baseboard together with you or take over the complete development process.

# 35 mm mounting rail

AL i.MX8M Mini & Plus

Cortex®-M7. GPU. NPU (Plus)

**▶** 1 – 4 GB RAM, 8 – 64 GB eMMC,

111 x 25 x 76 mm for mounting on

> 4x Arm® Cortex®-A53.

Cortex®-M4 (Mini)

> 4x Arm® Cortex®-A53.

microSD-Card Slot

> Stainless steel housing

Display-Line - Multitouch Panel



#### DL 7" i.MX8M Mini

- > 4x Arm® Cortex®-A53 Cortex®-M4
- 1 − 4 GB RAM. 8 − 64 GB eMMC. microSD-Card Slot
- → 7" IPS-Display, 1024 x 600 Pixel, 450 cd/m<sup>2</sup>
- i.MX6 ULL 1x Arm® Cortex®-A7
- TFT-Display

# DL i.MX6 ULL

- @800 MHz
- > 512 MB RAM, 512 MB NAND. 4 GB eMMC. microSD-Card Slot
- Glass front, frameless IP65, 5"
- ➤ Aluminium Front, PCAP Multitouch



# Hardware Software

- We are your Partner

Electronics<sup>2</sup>

- Your Ideas are our Motivation

know-how guarantee your success.

Development

As an experienced electronics services provider, we do far more than just production and assembly.



Manufacturing

Test & Ouality

