

VK3200 Family

VESA or arm mounting IPCs with Intel® Haswell platform



DIGITAL AUTOMATION TECHNOLOGIES

VK3200 - Highlights



- **Fanless arm or VESA mounting IPC** (operating temperature 0÷50°C)
- Intel® **Haswell ULT processor**
 - Intel® **Celeron 3765U** 1,9Ghz, 2 cores – 2 threads – 2MB smart cache – 15W
 - Intel® **Core™ i3-5010U** 2,1Ghz, 2 cores – 4 threads – 3MB smart cache – 15W
 - Intel® **Core™ i5-5350U** 1,8Ghz (2,9Ghz Turbo), 2 cores – 4 threads – 3MB smart cache – 15W
 - Intel® **Core™ i7-5650U** 2,2Ghz (3,1Ghz Turbo), 2 cores – 4 threads – 4MB smart cache – 15W
- **16:9 ratio 16 mln colors LED backlight TFT LCD displays**
 - 15,6", 18,5", 21,5", 24"
- **Full IP65** protection grade in a slim shape chassis with only 65mm depth
- **Resistive** touchscreen (TF) or **glass P-CAP multi-touch** touchscreen (TFM)
- **Easy mounting** (one person)
- **Easy access** to interfaces and **easy cabling**
- Integrated section (Button Area) dedicated to **emergency stop button, RFID interface, buttons, signal indicators, switches, keys, encoders, buzzer** or **front USB ports with easy access for maintenance**

VK3200 – Features 1/2



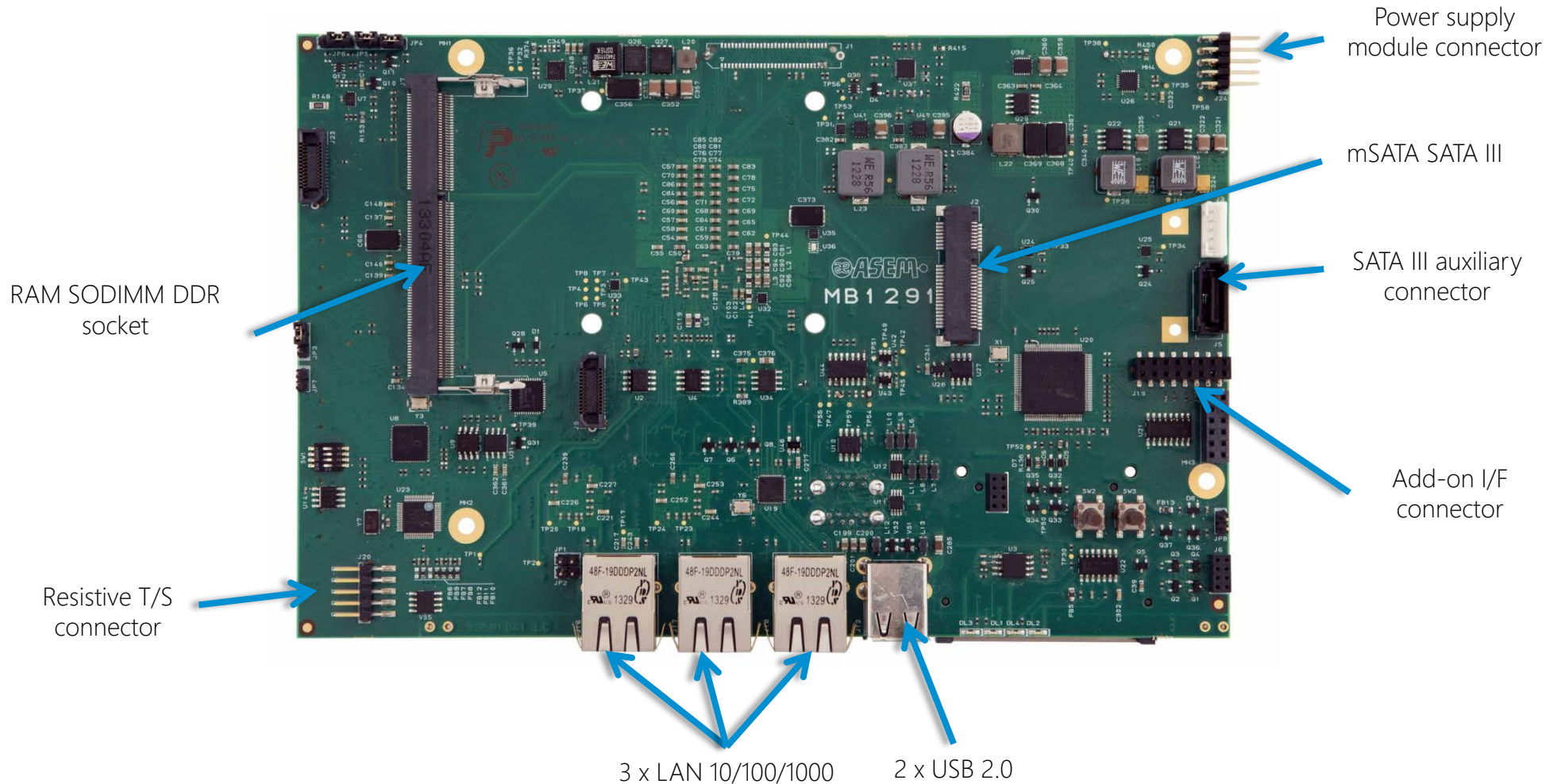
	VK3200-TF	VK3200-TFM
LED backlight TFT LCD	15.6" (wide 16:9) – 1366x768 / 1920x1080 18.5"(wide 16:9) – 1366x768 / 1920x1080 21.5" (wide 16:9) - 1920x1080	15.6" (wide 16:9) – 1366x768 / 1920x1080 18.5"(wide 16:9) – 1366x768 / 1920x1080 21.5" (wide 16:9) - 1920x1080 24" (wide 16:9) - 1920x1080
TOUCH-SCREEN	Resistive 5 wires	P-CAP Multitouch 4 fingers
FRONT PANEL	True Flat Aluminum	True Flat Aluminium and Glass
PROTECTION GRADE	Full IP65	
REAR COVER	Rear closing cover for connectors access with Ø 19mm hole and IP65 rubber cap for the possible USB devices cabling at customer own charge (optional)	
PROCESSOR	Intel® Celeron 3765U 1,9Ghz, 2 cores – 2 threads – 2MB smart cache Intel® Core™ i3-5010U 2,1Ghz, 2 cores – 4 threads – 3MB smart cache Intel® Core™ i5-5350U 1,8Ghz (2,9GHz Turbo), 2 cores – 4 threads – 3MB smart cache Intel® Core™ i7-5650U 2,2Ghz (3,3GHz Turbo), 2 cores – 4 threads – 4MB smart cache	
CHIPSET	Intel® Broadwell PCH-LP (Platform controller Hub – Low Power) included into processor	
VIDEO CONTROLLER	Intel® HD Graphics integrated in Celeron™ 3765U microprocessor, 850MHz clock Intel® HD Graphics 5500, integrated in Core™ i3 microprocessor, 900MHz clock Intel® HD Graphics 6000, integrated in Core™ i5, i7 microprocessors, 1GHz clock with LVDS 8bit/color digital interface	
SYSTEM MEMORY - RAM	2GB or 4GB or 8GB (1 x SODIMM DDR3 module)	
MASS STORAGE	1 bootable CFast SATA II embedded on board 1 x SSD mSATA SATA III	

VK3200 – Features 2/2



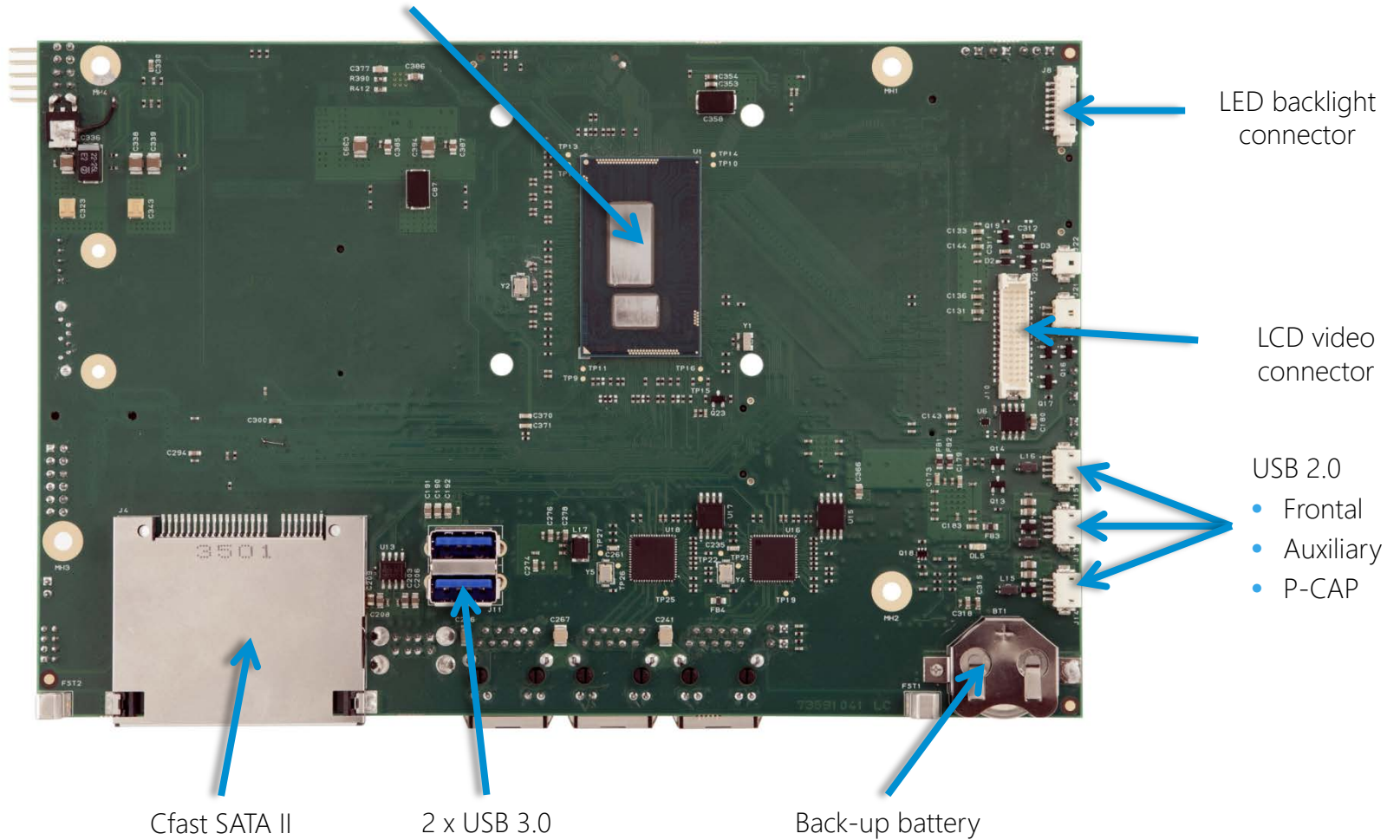
	VK3200-TF	VK3200-TFM
LAN	3 x LAN 10/100/1000Mbps (2 x Intel® I210-AT, 1 x Intel® I218-LM)	
USB	2 x USB 3.0 (Type-A, rear, protected, IP65) 2 x USB 2.0 (Type-A, rear, inside chassis)	
SERIAL (optional)	1 x RS232/422/485 (DB15M) 1 x RS232/422/485 (DB15M) optoisolated	
FIELDBUS (optional)	MPI, PROFIBUS, CANopen, PROFINET or EtherNet IP	
CASE	Installation Arm systems Material Color Handles Keyboard tray	
	For VESA 75/100 or pole (Bottom) or suspension (Top) arm mounting system Compatible with RITTAL CP 40, ROLEC TARAPLUS , HASEKE ULT KUPPLUNG 48 Aluminum alloy EN AB46400 Anti-scratchable painted - RAL 9006 Aluminium side handles, rectangular section (optional) Aluminium perimetral protection handle, circular section (optional for 18,5" and 21,5") Keyboard tray support (optional for 18,5", 21,5" and 24")	
BUTTONS AREA (optional)	Illuminated pushbutton, signal indicators, switches and interfaces on the front panel are optional. 1 x Emergency stop button (always hard wired) 1 x RFID (internally connected to USB) max 2 x USB ports Max 8 elements among signal indicators, push buttons, emergency stop button, keys and switches.	
POWER SUPPLY UNIT	24VDC isolated	
O.S. CERTIFIED	Microsoft Windows 10 IoT Enterprise 2016 LTSB, Microsoft Windows 7 Pro/Ultimate 32/64bit, Microsoft Windows Embedded Standard 7E/7P 32/64 bit	Microsoft Windows 10 IoT Enterprise 2016 LTSB, Microsoft Windows 7 Pro/Ultimate 32/64bit, Microsoft Windows Embedded Standard 7P 32/64 bit
OPERATING TEMPERATURE	0° - 50°	
APPROVALS	CE, cULus (pending)	

VK3200 - Motherboard 1291, top

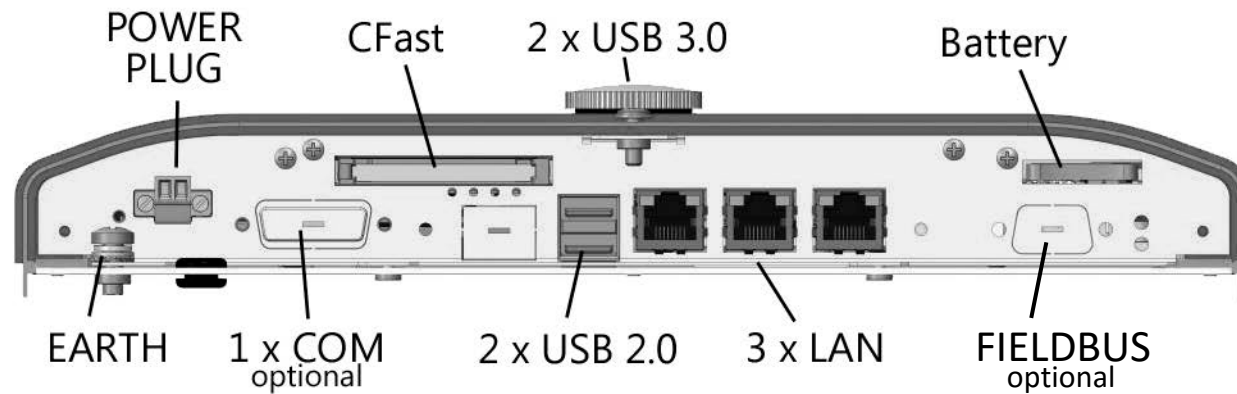


VK3200 - Motherboard 1291, bottom

Intel® Broadwell U processor and PCH-LP



VK3200 - Internal connectors & interfaces



VK3200 - Processors

- Intel® **Broadwell U platform** (5th generation Core i processors)

Ultra low voltage processors

- Intel® **Celeron 3765U** 1,9Ghz, 2 cores – 2 threads – 2MB smart cache – 15W
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 - 14nm process technology
 - Smart cache – 2/3/4 MB
 - Fast memory support - DDR3 1333/1600 MHz RAM
 - Low power consumption - 15W TDP

- PCH-LP **Companion Chip on MCP** (Multi Chip Product)

- Intel® Platform Controller Hub – Low Power
 - Efficiency and space reduction



VK3200 - Mass Storage

CFast

- 1 x bootable CFast SATA II embedded on board with external access

CFast card



Internal SSD mSATA

- 1 x mSATA SATA III internal connector for direct insertion of mSATA SSD

mSATA SSD

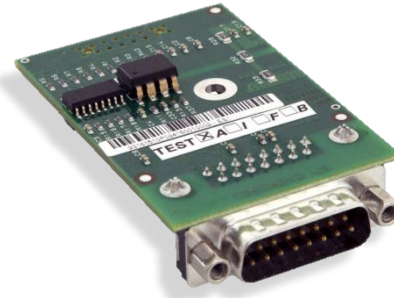


ASEM recommends SSD memory due to its **industrial reliability** and high thermal and vibration shock resistance

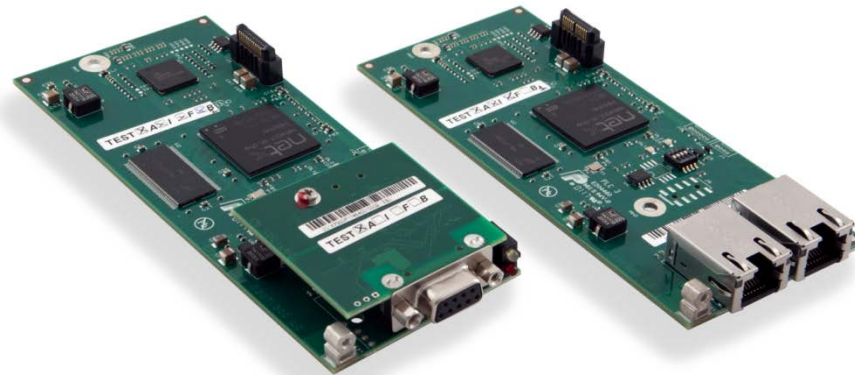
VK3200 - ASEM add-on Interfaces (optional)



1 x RS232/422/485 (DB15M)



1 x RS232/422/485 optoisolated (DB15M)

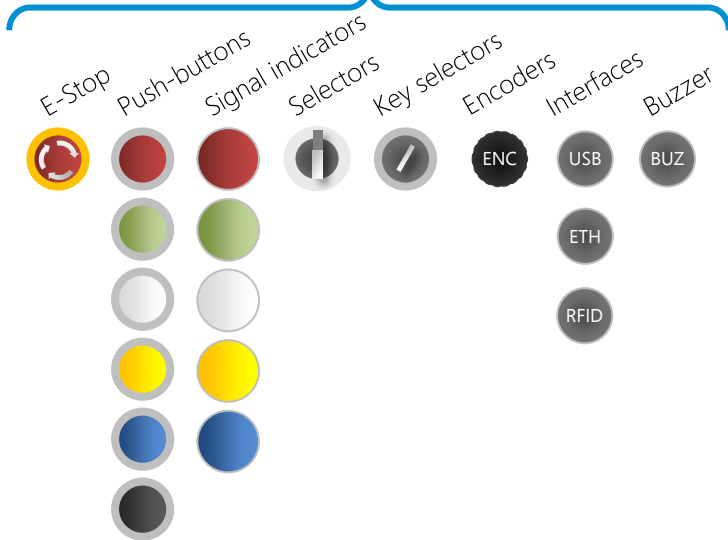


NETCore X for MB1291: MPI, PROFIBUS, CANopen, PROFINET or EtherNet IP

VK3200 – Button Area



- It's the area in the bottom part of the VK3200 system front panel.
- It can be freely configured with signal indicators, push-buttons, emergency stop button, encoders, selectors and interfaces. Just some constrain in quantity and position are requested.



- The elements are connected to rear terminal blocks or directly to the system.
- Each Button Area configuration is a custom part.

See Button Area documentation for further details

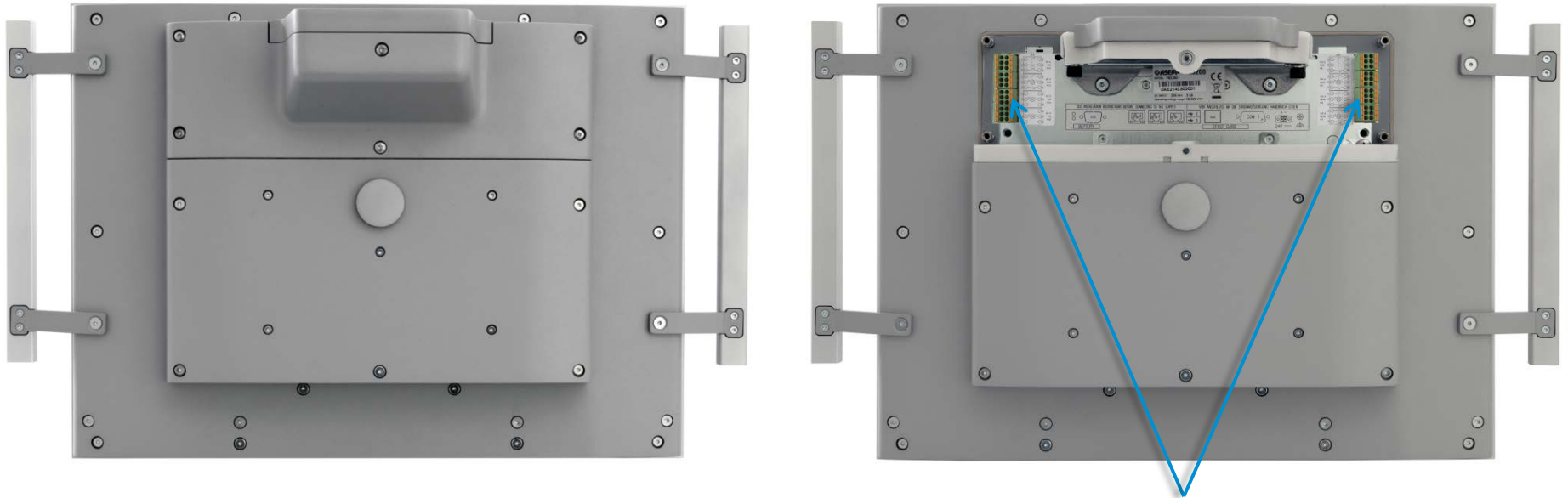
VK3200 – Button Area terminal blocks 1/2



For pole arm mounting system

VK3200 – Button Area terminal blocks 2/2

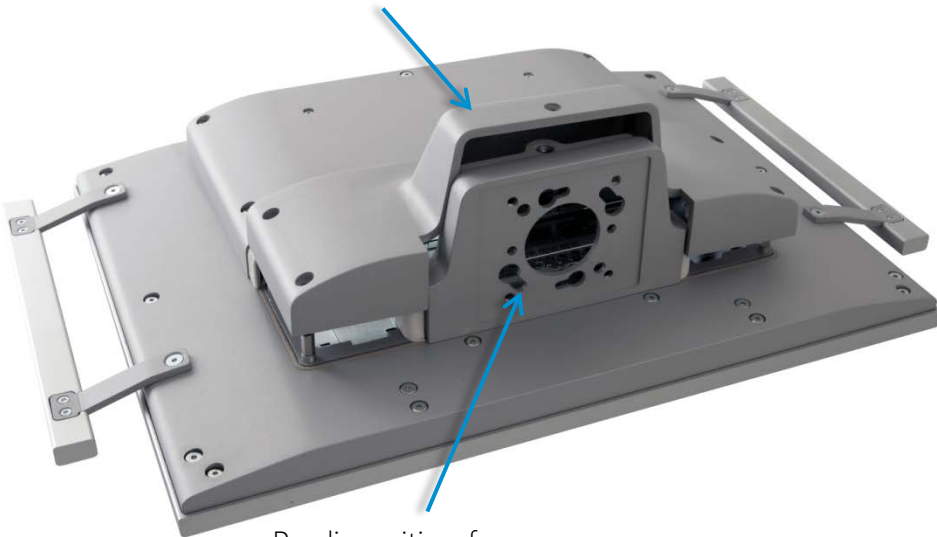
For suspension arm mounting system



Terminal blocks for
Button Area elements

VK3200 – Arm mounting installation

Open the rear cover



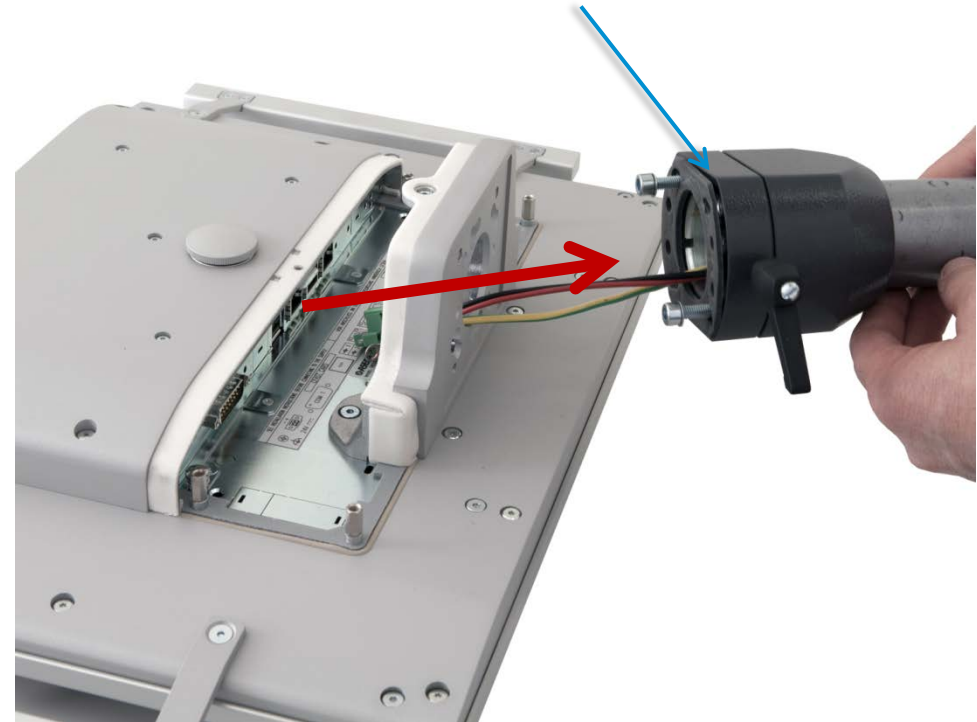
Predisposition for:

Rittal CP 40 90x71 support (120x65 with adapter plate)

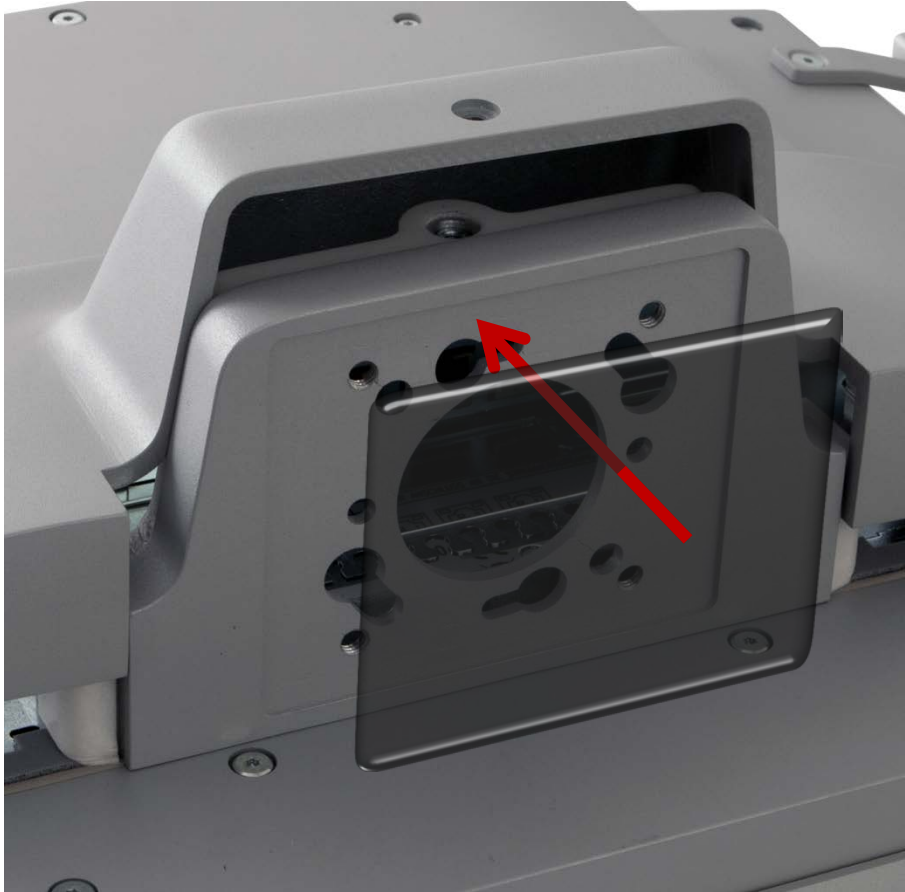
Rolec TARAPLUS (with adapter plate)

HASEKE KUPPLUNG 48 (with adapter plate)

Rittal CP 40 coupler



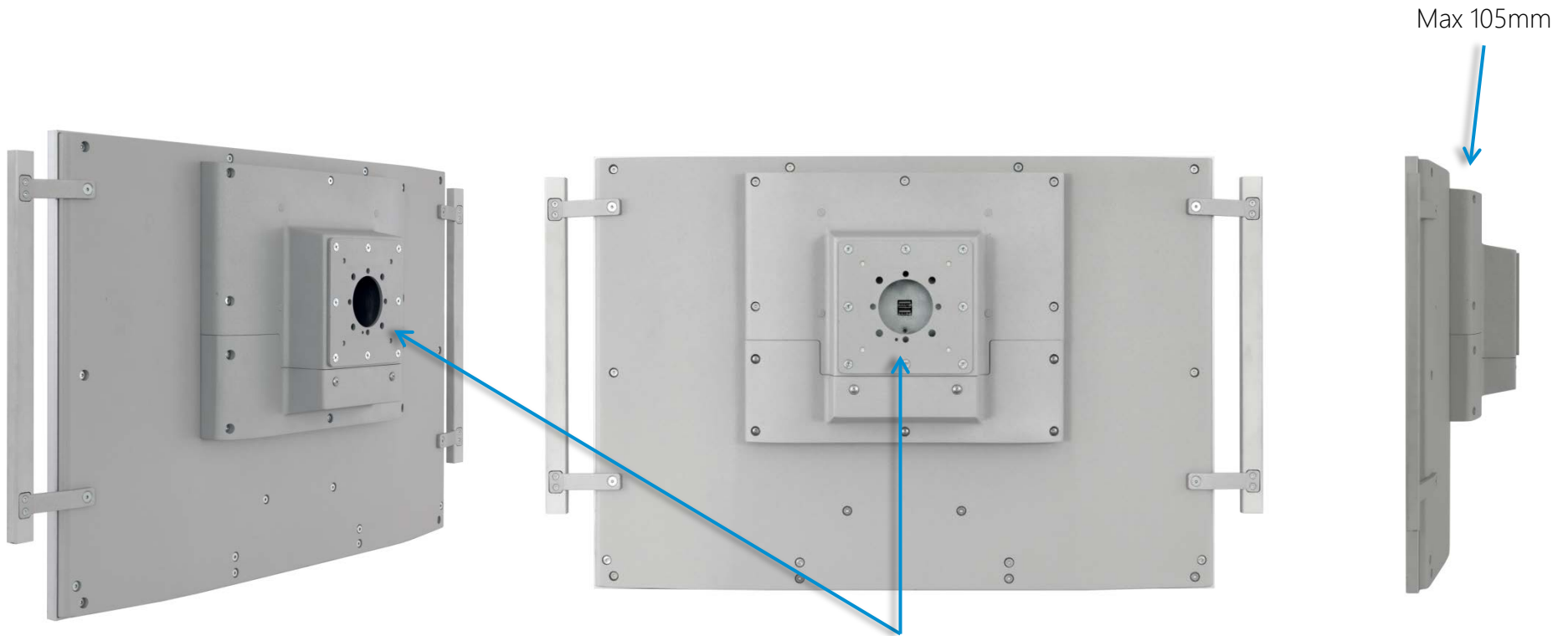
VK3200 – Installation with adapter plate



The adapter plate is placed in the milling of the arm connection side.

The adapter plate leaves open the holes according to the arm systems for which is designed for.

VK3200 – VESA 75/100 mounting system



Predisposition for VESA 75/100 mounting systems

VK3200 – Side handles (optional)



- Full aluminium side handles
- Rectangular section 20x12mm
- Fixed on the rear with screws
- Available for all the LCD sizes



VK3200 – Perimetral protection handle (optional)



- Full aluminium perimetral protection handle provide a protection against accidental hits with integrated handling feature
- Circular section Ø20mm
- Fixed on the rear with screws
- Available for 21,5" LCD



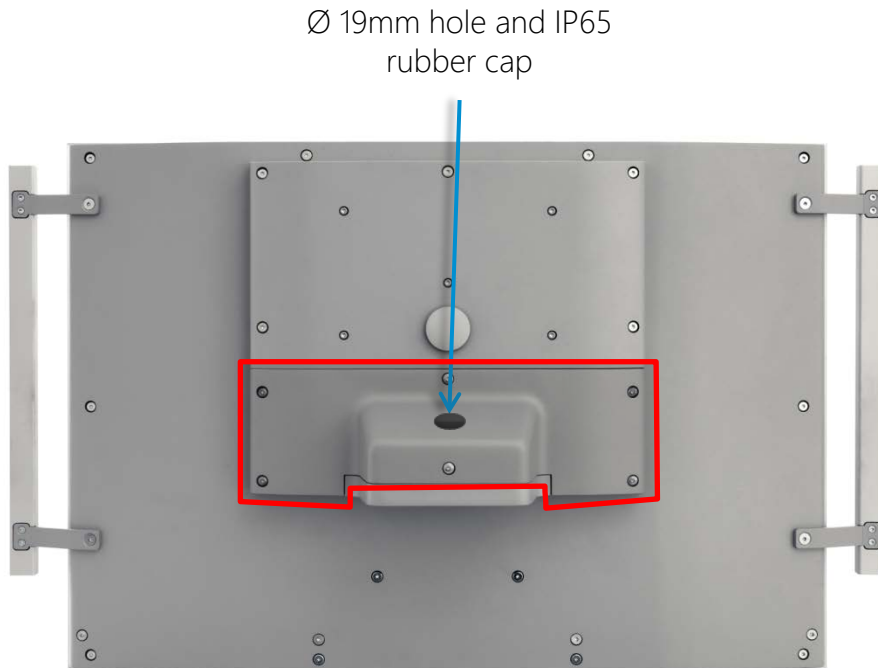
VK3200 – Keyboard support tray (optional)



- Keyboard support tray for keyboard and mouse
- Use the same fixing point of the handles and can be installed together
- Available for 21,5" LCD



VK3200 – Rear closing cover for connectors access



- The system can be ordered with the rear closing cover with a Ø19mm hole and IP65 rubber cap for the possible USB devices cabling at customer own charge
- Can be used in combination with optional keyboard support tray to connect and use office-like keyboard and mouse.

VK3200 - Long term availability



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