POWER

LOW ENERGY IS OUR FOCUS

REBOTNIX

GUSTAV AGX ORIN

NEXT LEVEL OF LOW ENERGY A.I. COMPUTING

MADE FOR THE INDUSTRY

ISO 16750-3 | OSP 16750 | IEC60068-2-1 | IEC60068

G-OS™ GUSTAV OPERATING SYSTEM

Modbus PROFI™
GUSTAV AGX ORIN (32 GB)

EDGE DEVICE / SKU: RB-AGX-ORIN32

Features

• NVIDIA® Jetson AGX ORIN™ SOM
• 8 x ARM64 CPU & 1792 CUDA & 56 Tensor-Cores
• 32 GB / Gigabytes of RAM (shared memory)
• 2 x USB 3.x connectors
• 1x 12 Volts input with Lemo Connector
• 1 x HDMI 2.1 Output
• 2 x RJ-45 Ethernet (both gigabit)
• 128 – 2.000 GB SSD (M2)
• Active cooling
• Supercap 200 mF
• Quickflash for all NVIDIA Jetpack SDK
• W: 42mm H:43.5mm D:220mm
• Optional RS232 | RS485 | CAN-BUS
GUSTAV AGX ORIN (64 GB)
EDGE DEVICE / SKU: RB-AGX-ORIN64

Features
- NVIDIA® Jetson AGX ORIN™ SOM
- 12 x ARM64 CPU & 2048 CUDA & 64 Tensor-Cores
- 64 GB / Gigabytes of RAM (shared memory)
- 2 x USB 3.x connectors
- 1 x 12 Volts input with Lemo Connector
- 1 x HDMI 2.1 Output
- 2 x RJ-45 Ethernet (both gigabit)
- 128 – 2.000 GB SSD (M2)
- Active cooling
- Supercap 200 mF
- Quickflash for all NVIDIA Jetpack SDK
- W: 42mm H:43.5mm D:220mm
- Optional RS232 | RS485 | CAN-BUS
**GUSTAV AGX ORIN 32 GB**

Jetson NVIDIA™ AGX Orin 32 GB
- 200 Sparse- | 100 Dense-INT8-TOPS
- 1792 CUDA-Cores und 56 Tensor-Cores
- 15 – 40 Watt
- 8 Kern ARM Cortex 64 Bit CPU (2.2 GHZ max.)
- 2 x NVIDIA v2.0 DL | PVA v2.0
- 32 GB 256 bit LPDDR 204,8 GB/s | 64 GB eMMC 5.1

  - Video Encode
    - 1 x 4k60, 3 x 4K30, 6 x 1080p60
    - 12 x 1080p30 (H.265, H.264) | AV1 (Beta)
  - Video Decode
    - 1 x 8K30 | 2 x 4K60 | 4 x 4K30 | 9 x 1080p60 | 9 x 1080p30 (H.265 | H.264)
    - 18 x 1080p30, VP9, AV1 (Beta)
- 2 x GbE RJ-45 (Supported by GUSTAV AGX ORIN)
- 1x 8K60 multimodal DP 1.4a | 1.4a/HDMI 2.1
- 15-40 Watt power consumption

**GUSTAV AGX ORIN 64 GB**

Jetson NVIDIA™ AGX Orin 64 GB
- 275 Sparse- | 138 Dense-INT8-TOPS
- 2048 CUDA-Cores und 64 Tensor-Cores
- 15 – 60 Watt
- 12 Kern ARM Cortex 64 Bit CPU (2.2 GHZ max.)
- 2 x NVIDIA v2.0 DL | PVA v2.0
- 64 GB 256 bit LPDDR 204,8 GB/s | 64 GB eMMC 5.1

  - Video Encode
    - 2 x 4k60, 4 x 4K30, 8 x 1080p60
    - 16 x 1080p30 (H.265, H.264) | AV1 (Beta)
  - Video Decode
    - 1 x 8K30 | 3 x 4K60 | 7 x 4K30 | 11 x 1080p60 | 22 x 1080p30 (H.265 | H.264)
    - VP9, AV1 (Beta)
- 2 x GbE RJ-45 (Supported by GUSTAV AGX ORIN)
- 1x 8K60 multimodal DP 1.4a | 1.4a/HDMI 2.1
- 15-60 Watt power consumption

All data from NVIDIA, mistaken are not excluded.
Accessories

REBOTNIX OS Software
• REBOTNIX gOS™ Realtime Linux OS

REBOTNIX VISIONTOOLS
• HQ GPS UBLOX
• ModBus Server incl. Python Bindings
• Hardware Encryption Libraries
• Industry proofed A.I. Models
• Camera USB3.x Vision Support
• FFMPEG Acceleration HW Binary
• Streaming and Transcoding tools

Mounting AddOns
• 35mm DIN rail mounts

Communication AddOns
• RS232 I
• RS485 I
• CAN BUS I
• CAN BUS VERIFIED

Cameras
• USB 3 CAMERAS
• GiGe CAMERAS
• FPD-III LINK

Storage Addons (mounted internal)
• 250 Gigabytes M2.SSD (internal)
• 500 Gigabytes M2.SSD (internal)
• 1000 Gigabytes M2.SSD (internal)
• 2000 Gigabytes M2.SSD (internal)

Approvals
CE, RohS
GUSTAV SUPERMINICOMPUTER

DIMENSIONS

Components

<table>
<thead>
<tr>
<th>No.</th>
<th>Part name</th>
<th>Pcs</th>
<th>Material</th>
<th>Color / Finish</th>
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<td>Panel</td>
<td>2</td>
<td>Aluminium A1050P</td>
<td>Silver • Black / Anodized</td>
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<td>2</td>
<td>Heat-sink top cover</td>
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<td>Extruded aluminium A6063S-T5</td>
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<td>1</td>
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<tr>
<td>4</td>
<td>Screw (Hexagonal)</td>
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<tr>
<td>5</td>
<td>Rubber feet</td>
<td>4</td>
<td>Polyurethane</td>
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</tbody>
</table>
Figure 2: Orin System-on-Chip (SoC) Block Diagram

NOTE: Jetson AGX Orin 32GB will have 2x 4 Core Clusters, and 7 TPCs with 14 SMs

Note: The above diagram shows Jetson AGX Orin 64GB. Jetson AGX Orin 32GB will have 7 TPCs and 14 SMs.
Solutions

Industrial  Aerospace/Defense  Healthcare  Construction  Agriculture  Smart City

Retail  Logistics  Inventory Mgmt  Delivery  Inspection  Service
### IP-based applications

#### Video Transcoding & Transmuxing
AVC<->HEVC up 4K x 2K 60 Hz
Protocol Conversation
RTMP, SRT, HTTP (s), RTSP

#### Video Decoders
- H.265 Video Decoder
- H.264 Video Decoder
- AV1 Video Decoder
- VP8 Video Decoder
- VP9 Video Decoder
- JPEG Decoder

#### Video Encoders
- H.264 / AVC Video Encoder
- H.265 / HEVC Video Encoder
- AV1 / Video Encoder
- VP9 Video Encoder
- JPEG Encoder

#### Encryption and Decryption
AES - 128 CBC

#### Video Filters
- Rotation
- Scaling
- Artificial Image Processing (CUDA)
Use scenarios
OUR READY TO GO PLATFORMS, BASED ON OUR SOFT- AND HARDWARE TECHNOLOGY

MONITORING & AUTOMATION OF INDUSTRIAL PLANTS
WE CONVERT VEHICLES TO DATA SUPPLIERS
WE CONVERT CAMERAS TO SENSORS
WE CONNECT NETWORKS THROUGH FAST META DATA TRANSFER
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