Overview

MistySOM-G2L (MW-G2L-E32G-D2G-I-WX-V0) is the version of the MistySOM built around the Renesas RZ/G2L.

The MistySOM-G2L is built from the ground up to enable battery powered applications ranging from human machine interface (HMI) solutions to embedded devices for computer vision applications.

The SOM is ruggedized for industrial temperatures and offers long term (10 year) firmware support via a CIP kernel based Linux BSP. It includes a dual core Cortex-A55 and single core Cortex-M33 CPU.

Available separately is the MistyCarrier (MW-V2L-G2L-I-WWB-V0) board allowing easy accessibility to a variety of interfaces.

Get started with the MistySOM Wiki.

About MistySOM-G2L

MistySOM-G2L is ideal for use in industrial and commercial computing applications where low power, reliability, and costs are critical.

Target Applications

- Barcode Scanner System / Self-Checkout
- Industrial Human-Machine-Interface (HMI)
- Portable Equipment
- Network Gateway or Hub
- Precision Time Synchronization
- General Single Board Computer
- Wearable Camera
## MW-G2L-E32G-D2G-I-WX-V0 Specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPU</td>
<td>Renesas RZ/G2L</td>
</tr>
<tr>
<td>CPU</td>
<td>Cortex-A55 (1.2GHz) x 2, Cortex-M33 x 1</td>
</tr>
<tr>
<td>GPU</td>
<td>3D graphics engine Mali-G31</td>
</tr>
<tr>
<td>NPU</td>
<td>None</td>
</tr>
<tr>
<td>Storage</td>
<td>32 GB eMMC (16-128 GB available)</td>
</tr>
<tr>
<td>Memory</td>
<td>2 GB DDR4 (1-2 GB available)</td>
</tr>
<tr>
<td>Temp. Range</td>
<td>-40 to 85°C</td>
</tr>
<tr>
<td>RTC</td>
<td>Yes</td>
</tr>
<tr>
<td>Dimensions</td>
<td>63 x 42 x 7.05 mm</td>
</tr>
<tr>
<td>Carrier Board Connections</td>
<td>2 x 120 pin high-speed mezzanine connectors (ST5-60-1.50-L-D-P-TR)</td>
</tr>
</tbody>
</table>
| Data Lanes Available | MIPI CSI (4-lanes)  
MIPI DSI (4-lanes)  
2x USB 2.0  
2x QSPI, OctaFlash or Hyperflash Interface  
2x dedicated I2C  
2x GB ethernet (RGMII)  
2x CANBus  
Parallel 24-bit LCD bus  
GPIO - GPIO, SSI, SPI, UART, CANBus, I2C, Timer, IRQ |
| Inputs      | 8x 12 bit ADC  
2x Audio Clock |
| Supported Cameras | [Google Coral Cam](#)  
[E-con Systems - e-CAM20_CRUZ_1H01R2](#)  
E-con Systems - e-CAM21_CURZ_1H01R2 (link not available) |

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*MistySOM Product Brief - MW-G2L-E32G-D2G-I-WX-V0*
Dimensions

4x M2 mounting holes
42x63mm Outside dimensions
Learn More

Distribution

More information about ordering MistySOM can be found on GroupGets.

Media

- Surviving the Semiconductor Shortage on SoMs - Embedded Computing Design
- MistySOM Renesas RZ/G2L or RZ/V2L SoM and devkit goes for $112 and up - CNX Software
- MistySOM: The Ultimate Low Power Computer Vision SOM by MistyWest - GroupGets (YouTube)
- How to Cross The Embedded Computing Valley of Death - IoT One / Industrial IoT Spotlight
- Embedded Vision and Connected Intelligence for IoT - Industry40TV (YouTube)

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MistySOM Product Brief - MW-G2L-E32G-D2G-I-WX-V0