



## Data Sheet CODESYS Control for BeagleBone SL

The product "CODESYS Control for BeagleBone SL" extends the Linux environment of a BeagleBone Black with the functions of a CODESYS programmable PLC.

### Product description

The CODESYS runtime environment contained in the product is specially adapted to the Beaglebone Black, the community supported hardware. With a CODESYS single device license (SL), users can permanently realize a PLC device and use functions of the freely available development environment CODESYS Development System to configure it in IEC 61131-3.

### Benefits

The software package contains an extension for the CODESYS programming environment, with which an update mechanism is integrated in order to install the runtime environment on the BeagleBone Black without LINUX knowledge. The installation of the CODESYS Runtime component on the BeagleBone Black takes place in the form of a Debian package, directly from the CODESYS Development System. The supplied examples supplement the software package with useful applications that facilitate the first steps in the application.

With the integrated CODESYS "Wink" mechanism, the hardware can be clearly assigned to an existing gateway connection by flashing the LED.

Detailed information can be found in the [CODESYS Online Help](#).

### Interfaces

- CODESYS OPC UA Server, as full version for data exchange.
- GPIOs and analog inputs, supported as local interfaces.

### Visualization

- CODESYS WebVisu, is included as full version in the delivery of the runtime package.

### Fieldbus support

With the delivery of the Runtime Package the following fieldbuses are supported:

- CODESYS CANopen Manager / Device
- CODESYS EtherCAT Master
- CODESYS EtherNet/IP Scanner / Adapter
- CODESYS J1939
- CODESYS Modbus TCP Master / Slave
- CODESYS Modbus Serial Master / Slave
- CODESYS PROFINET Controller / Device

### Product options

Further products can be licensed for a fee:

- CODESYS BACnet SL
- CODESYS KNX SL
- CODESYS SoftMotion SL
- CODESYS SoftMotion CNC+Robotics SL

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## General information

### Manufacturer:

CODESYS GmbH  
 Memminger Strasse 151  
 87439 Kempten  
 Germany

### Support:

<https://support.codesys.com>

### Item:

CODESYS Control for BeagleBone SL

### Item number:

2302000013

### Sales:

CODESYS Store

<https://store.codesys.com>

### Included in delivery:

- Package for the CODESYS Development System including CODESYS Control, license agreement and device description
- License Key

## System requirements and restrictions

<b>Programming System</b>	CODESYS Development System V3.5.16.10 or higher
<b>Runtime System</b>	CODESYS Control V3.5.16.10
<b>Supported Platforms/ Devices</b>	<ul style="list-style-type: none"> <li>• BeagleBone Black (Version C and later), BeagleBone Green, BeagleBone Blue, BeagleBone Enhanced</li> <li>• Running on official debian-based linux images from <a href="https://beagleboard.org">https://beagleboard.org</a></li> </ul> <p>Note: Use the tool "Device Reader" to find out the supported features of your device (free of charge component of CODESYS Development System).</p>
<b>Additional Requirements</b>	<ul style="list-style-type: none"> <li>• CANopen can only be used with an additional CAN-CAPE</li> <li>• Dynamic libraries needed by the CODESYS Control Runtime binary:             <ul style="list-style-type: none"> <li>◦ libm.so.6</li> <li>◦ libpthread.so.0</li> <li>◦ libdl.so.2</li> <li>◦ librt.so.1</li> <li>◦ libc.so.6</li> <li>◦ libgcc_s.so.1</li> </ul> </li> </ul>
<b>Restrictions</b>	<ul style="list-style-type: none"> <li>• CODESYS WebVisu: Port 9090</li> <li>• No device support for BeagleBoard-X15</li> </ul>
<b>Licensing</b>	<p>Single device licensing</p> <p>License activation optional on CODESYS Key or CODESYS Softcontainer (free of charge component of CODESYS Controls). Licensing via CODESYS Softcontainer is strictly linked to the selected hardware.</p> <p>Note: Without a license the software runs in demo mode for two hours (manual restart is needed).</p>
<b>Required Accessories</b>	Optional: CODESYS Key

*Note: Not all CODESYS features are available in all territories. For more information on geographic restrictions, please contact [sales@codesys.com](mailto:sales@codesys.com).*

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*Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.*