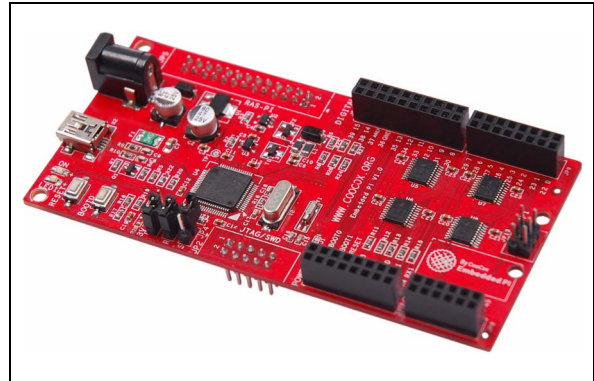


Embedded Pi, triple-play platform for STM32, Raspberry Pi and Arduino™

Data brief

Features

- STM32F103 running at 72 MHz with 128 Kbytes Flash memory and 20 Kbytes RAM
- Form factor compatible with both 5 V and 3V3 Arduino™ shields, selectable with jumpers
- Hundreds of Arduino™ shields available on the market enhance the control capability of Embedded Pi and Raspberry Pi, e.g. to control motor, sensors, etc.
- Direct connection to the Raspberry Pi
- Selection of one of the three modes of operation with a jumper
- Arduino™ form factor compatible interfaces:
 - 1 SPI
 - 1 I2C
 - 4 PWM
 - 1 UART
 - 6 analog inputs
- Embedded Pi extended interfaces:
 - 1 SPI
 - 1 I2C
 - 2 PWM
 - 1 UART
 - 6 analog inputs
 - 1 CAN



Description

The Embedded Pi, based on the STM32F103 MCU, is a triple-play platform for Raspberry Pi, Arduino™ and the STM32 MCU family. Blending all three communities together, the Embedded Pi helps you to get the most out of each platform. The Embedded Pi can operate in 3 modes: Standalone, ST-Adapter and Raspberry Pi.

In Standalone mode the Embedded Pi acts as a base platform, the STM32F103 controls the Arduino™ shields directly.

In ST-Adapter mode the Embedded Pi controls the Arduino™ shields, and the Raspberry Pi acts as the GUI or command line console that send commands and data to, and receives data from, the Embedded Pi.

In Raspberry Pi mode the Embedded Pi acts as a hardware connection bridge between the Raspberry Pi and Arduino™ shields.

For more information, visit www.element14.com/embedded-pi

1 Ordering information

To order the STM32-EMBPI/14 Embedded Pi triple-play platform, use the order code STM3210B-ARD.

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
02-Oct-2013	1	Initial release.

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

ST PRODUCTS ARE NOT DESIGNED OR AUTHORIZED FOR USE IN: (A) SAFETY CRITICAL APPLICATIONS SUCH AS LIFE SUPPORTING, ACTIVE IMPLANTED DEVICES OR SYSTEMS WITH PRODUCT FUNCTIONAL SAFETY REQUIREMENTS; (B) AERONAUTIC APPLICATIONS; (C) AUTOMOTIVE APPLICATIONS OR ENVIRONMENTS, AND/OR (D) AEROSPACE APPLICATIONS OR ENVIRONMENTS. WHERE ST PRODUCTS ARE NOT DESIGNED FOR SUCH USE, THE PURCHASER SHALL USE PRODUCTS AT PURCHASER'S SOLE RISK, EVEN IF ST HAS BEEN INFORMED IN WRITING OF SUCH USAGE, UNLESS A PRODUCT IS EXPRESSLY DESIGNATED BY ST AS BEING INTENDED FOR "AUTOMOTIVE, AUTOMOTIVE SAFETY OR MEDICAL" INDUSTRY DOMAINS ACCORDING TO ST PRODUCT DESIGN SPECIFICATIONS. PRODUCTS FORMALLY ESCC, QML OR JAN QUALIFIED ARE DEEMED SUITABLE FOR USE IN AEROSPACE BY THE CORRESPONDING GOVERNMENTAL AGENCY.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2013 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[STM3210B-ARD](#)