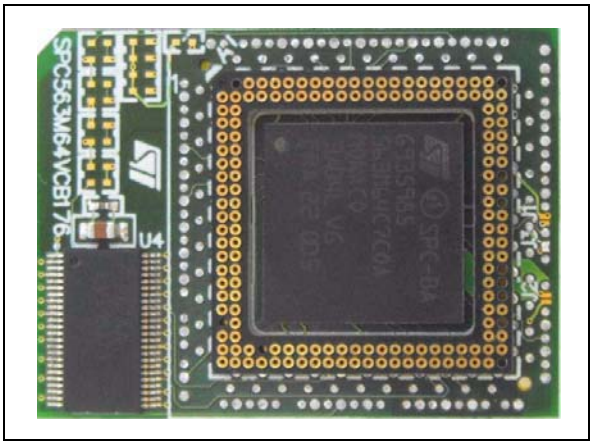
SPC564A70AVB176
SPC564A80AVB176/324

SPC564AXX microcontroller family calibration and emulation system

Data brief



Features

- Support for LQFP144 and LQFP176 MCU production package allowing calibration systems to be built without requiring modifications to the standard production system housing
- VertiCal interconnect standard supported by multiple calibration tool developers, ensuring maximum flexibility in tool choice.
- On-board latch providing a 16-bit de-multiplexed bus interface from the SPC564AXX 16-bit multiplexed calibration interface.
- Support for Nexus-based debug tools even if application PCB does not include Nexus connector.
- Nexus functionality with 12 Message Data Out (MDO) signals.
- Support for full-feature calibration tools, via availability of comprehensive set of device signals available on VertiCal connector.
- Allows system calibration without impacting standard MCU I/O resources.
- Allows system calibration regardless of availability of standard MCU external bus.
- Specifications:
- Board Size 30 x 40.5mm
- Target connector compatible with TQPACK144SD and TQPACK176SD

Description

The Vertical Adapter is designed to substitute the device on an ECU version used during engine calibration.

All VertiCal hardware is designed to support a standardized tool connector, allowing a variety of calibration and debug hardware to be connected and reused.

VertiCal components are available to support a wide range of SPC564AXX devices in various package types.

Optional POLYPOD-TQ176 and POLYPOD-BG324 allow mounting the SPC564A70AVB176 and SPC564A80AVB176/324 boards on the application's module. The system can be integrated with an optional SPC56XVTOP-A RAM top board for increased overlay memory and additional debug connections.

For further information contact your local STMicroelectronics sales office. www.st.com

1 Order codes

Table 1. Order codes

Order codes	Reference
SPC564A70AVB17	VertiCal Base board for SPC56 A line with 2M memory and LQFP176 target package. Requires POLYPOD-TQ176 for mounting on application board.
SPC564A80AVB176	VertiCal Base board for SPC56 A line with 4M memory and LQFP176 target package. Requires POLYPOD-TQ176 for mounting on application board.
SPC564A80AVB324	VertiCal Base board for SPC56 A line with 4M memory and BGA324 target package. Requires POLYPOD-BG324 for mounting on application board.
POLYPOD-TQ176	TQ-PolyPod for QFP176 targets.
POLYPOD-TQ324	PolyPod for BGA324 targets.
SPC56XVTOP-A	RAM/Debug Top Board for SPC56 A line Vertical

2 System requirements

- Windows PC (XP, Vista, 7)

3 Calibration software

- Green Hills MULTI
- Wind River diab
- Cosmic C Compiler
- Raisonance RLink
- ETAS INCA

4 Revision history

Table 2. Document revision history

Date	Revision	Changes
26-Sep-2016	1	Initial release.

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