



SPC563Mxx microcontroller family calibration and emulation system

Data brief

Features

- Support for LQFP144 and LQFP176 MCU production packages 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 SPC563M64 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 sockets



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 SPC563M64 devices in various package types.

The complete system consists of a SPC563M64AVB144/176 board, a calibration RAM board SPC56XVTOP-M and a POLYPOD-TQ144/176 Poly-Pod which plugs directly into the motherboard.

1 Order codes

Table 1. Device summary

Part number	Reference
SPC563M64AVB144	Calibration System for SPC563M64 mcu in QFP144 target package.
SPC563M64AVB176	Calibration System for SPC563M64 mcu in QFP176 target package.
POLYPOD-TQ144	TQ-PolyPod for QFP144 targets.
POLYPOD-TQ176	TQ-PolyPod for QFP176 targets.
SPC56xVTOP-M	RAM/Debug Top Board for SPC563M64 Vertical Base boards.

2 System requirements

- Windows PC (XP, Vista, 7)

3 Calibration software

- ETAS INCA

4 Revision history

Table 2. Document revision history

Date	Revision	Changes
19-July-2012	1	Initial release.
10-Sep-2012	2	Updated feature list on cover page.
13-Sep-2013	3	Updated disclaimer.

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