Aardvark™ OEM
SPI Host Adapter



Key Features

SPI Master
- USB-to-SPI interface
- Read/Write to SPI device
- MCU emulation
- EEPROM/Flash programming

Performance
- Speeds up to 1 MHz
- Two GPIOs available

Aardvark API
- Create custom software applications
- Most widely utilized Total Phase API
- Configure and utilize GPIOs
- Target power configurable via API
- Usable example files included
- Cross-platform support for Windows, Linux, Mac OS X

Quality
- Manufacturing: ISO 9001, ISO 13485, AS9100C, ITAR
- CE, RoHS
- One year warranty
- Easy end-customer upgrade to the Aardvark™ I2C/SPI Host Adapter

USB Bus-Powered
- Portable
- Field-deployable
- No extra power adapters needed

Cost/Performance Benefits
- Competitive price
- Robust API-based programming
- Reduced overhead through bundling
- Flexible integration

Customization
- Printable white label
- Reinforces your brand

An ever-wider array of devices and the increasing pressure to minimize costs means that you need to get the most out of your embedded systems interface tools - and the Aardvark™ OEM SPI Host Adapter is expressly designed to enable your competitive edge.

Based on our flagship Aardvark™ I2C/SPI Host Adapter, the Aardvark OEM SPI Host Adapter is a low-cost, easy-to-use, easy-to-bundle USB-to-SPI interface. It helps you to focus on core competencies by deploying your solutions with minimal engineering overhead and allows your end-customers to easily interface with your downstream embedded system environment.

Bundling
- Interface with evaluation boards at a competitive price point
- White label reinforces your brand

Production
- Deploy large quantities in a production environment
- Program devices on manufacturing tests

Prototyping
- MCU emulation
- Use as Master to interface with sensors, memory chips, and other peripherals

Bundling Use Case

Bundle the Aardvark™ OEM SPI Host Adapter with evaluation boards on which you've mounted your battery power management chip. Provide your end-customers who manufacture batteries with these bundled battery power management solutions. The Aardvark™ OEM SPI Host Adapter allows the battery manufacturers to easily configure the chip's settings.

Integration Use Case

Build the Aardvark™ OEM SPI Host Adapter into your transportation systems test box to create a cable tester. Field technicians will use this train-servicing kit to run tests on a train's electronic subsystem, load new firmware, and perform other vital operations.

Aardvark™ OEM SPI Host Adapter

Applications

Power Management
Battery charging
Battery power monitoring

Industrial and Home Automation
Motor controls
Lighting controls

Audio Processing
Converters
Signal Processing

Sensors
Accelerometers
Pressure
Temperature
Light

Specifications

Software

Create your own custom applications with the Aardvark OEM SPI Host Adapter using the flexible, powerful, and well-documented Aardvark API.

Custom Applications

- Create specialized programs tailored to your specific application
- Interface and communicate easily with a wide variety of chips
- Integrate the Aardvark OEM SPI Host Adapter seamlessly into your application
- Start developing your custom application quickly with easy-to-understand examples

Aardvark API

Supported languages: C/C++/C#, Python, .NET, VB.NET, Visual Basic 6

Supported Operating Systems (32-bit and 64-bit)

- Windows: XP, Vista, 7, 8, 8.1
- Linux: Red Hat, SuSE, Ubuntu, Fedora, Arch, CentOS, Debian
- Mac OS X: 10.4, 10.5, 10.6, 10.7, 10.8

Hardware

Bit Rate
SPI Master: 125 kHz - 1 MHz

Target Bus Interface
SPI Master
2 GPIO pins

Host Bus Interface
USB 1.1
Type B receptacle

Target Bus Cable
10-pin ribbon cable
1.27 mm (0.05 in) pitch
130.175 mm (5 1/8 in) length

Target Bus Connector
Type: 2x5 IDC female, 2.54 mm (0.10 in) pitch
Pinout: Power Pins: GND (Pins 2, 10), NC/+5V (Pins 4, 6)
SPI Pins: MISO (Pin 5), SCLK (Pin 7), MOSI (Pin 8), SS (Pin 9)
GPIO Pins: Pin 1, Pin 3

DC Characteristics
Target Power: +5V, 25mA max
SPI Signal: 3.3V, 10mA

Dimensions
W x D x L: 55.6 mm x 22.2 mm x 89 mm
(2.19 in x 0.87 in x 3.5 in)

Weight
64 g (0.14 lbs)

Operating Temperature
10 to 35 C (50 to 95 °F)

Ordering information

Aardvark OEM SPI Host Adapter	
Part Number	TP250410
Minimum Order Quantity	100 units
Country of Origin	USA
HTS	8543200000
ECCN	EAR99

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