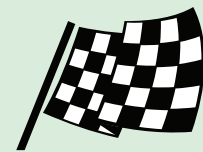


**When a tight Time To Market is looming, and a steep learning curve ahead of you, the Avnet SpeedWay Design Workshops<sup>™</sup> is a cost effective way to address these challenges with the smallest investment in time.**

The MiniZed SpeedWay Design Workshops<sup>™</sup> help engineers jump start the development of Xilinx All Programmable SoC products. The courses revolve around the single-core Xilinx<sup>®</sup> Zynq<sup>®</sup>-7000 All Programmable SoC device, though the training can be utilised across all Xilinx SoCs. The targeted board is the Avnet MiniZed<sup>™</sup> Zynq SoC development board, a cost-optimized prototyping platform perfect for embedded vision and Industrial IoT systems.

These one-day instructional programs will train engineers on the latest design flows using Xilinx's Vivado<sup>®</sup> Design Suite through a mix of lecture and interactive hands on labs.



## **SPEEDWAY**

For designers new to Xilinx SoC technology and tools, or those looking to brush up their skills, Avnet will offer two introductory courses:

**Developing Zynq Hardware**

**Developing Zynq Software**

More experienced designers can choose from two advanced course offerings:

**Integrating Sensors on MiniZed with Petalinux**

**A Practical Guide to Getting Started with Xilinx SDSoc<sup>™</sup> Development Environment**

## Event Agenda:

COURSE	DESCRIPTION
<b>Developing Zynq Software</b>	Developers will be introduced to Xilinx SDK and shown how it offers everything necessary to make Zynq software design easy. This class will cover these capabilities, including BSP creation, built-in drivers, example C code, interrupts, debugging, flash programming, I2C interface between a TE connectivity Pmod, and where to get more help.
<b>Developing Zynq Hardware</b>	Engineers will be introduced to the single ARM Cortex -A9 Processor core and explore its robust AXI peripheral set. Doing so you will utilize the Xilinx embedded systems tool set to design a Zynq AP SoC system, add Xilinx IP as well as custom IP, run software applications to test the IP, and finally Debug your embedded system.
<b>Integrating Sensors on MiniZed with PetaLinux</b>	From within an Ubuntu OS running within a virtual machine, learn how to install PetaLinux 2017.1 and build embedded Linux targeting MiniZed. In the hands-on labs learn about Yocto and PetaLinux tools to import your own FPGA hardware design, integrate user space applications, and configure/customize PetaLinux. Use Xilinx SDK tools to develop/debug user applications and use example application code to capture data from a TE Connectivity HTU21D I2C sensor. Where service is available, an Internet of Things (IoT) application will be used to publish the sensor data periodically to the cloud using the MQTT protocol. Source code for the user applications are included with the hands-on labs for you to leverage as a launch point in your custom design.
<b>A Practical Guide to Getting Started with Xilinx SDSoC</b>	Using proven flows for SDSoC, customers will learn how to navigate SDSoC. Through hands-on labs, we will create a design for a provided platform and then also create a platform for the Avnet MiniZed. You will see how to accelerate an algorithm in the course lab. This experience should give you the background to assist you in developing custom platforms with custom algorithms, accelerated by SDSoC.

### Whats Included:

- MiniZed Board
- Morning Tea & Lunch
- Printed Material

### Scheduled Dates:

COURSE	AUCKLAND
Developing Zynq Software	Tuesday, 26 June 2018
Developing Zynq Hardware	Wednesday, 27 June 2018
Integrating Sensors on MiniZed with PetaLinux	Thursday, 28 June 2018
A Practical Guide to Getting Started with Xilinx SDSoC	Friday, 29 June 2018

### Whats Next:

To register your interest please contact your local Avnet or Element14 office, your local Xilinx Field Applications Engineer or email [XilinxANZ@avnet.com](mailto:XilinxANZ@avnet.com)



element14

### Costs:

ORDERING CODE	DESCRIPTION	RESALE PRICE USD*
AES-SPWY-1-Course-R	Choice of 1 Speedway Course	\$ 185.00
AES-SPWY-2-Course-R	Choice of 2 Speedway Courses	\$ 275.00
AES-SPWY-3-Course-R	Choice of 3 Speedway Courses	\$ 350.00
AES-SPWY-4-Course-R	Choice of 4 Speedway Courses	\$ 400.00

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\* In USD, excluding GST and delivery fees. Orders processed by Avnet

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