# ASDAK

Augmented Switching<sup>™</sup> Technology Accelerated Development Kit Digital Programmable Gate Drivers

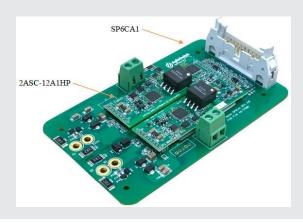
## **Unlock the Full Potential of SiC**

Microchip's Accelerated Silicon Carbide (SiC) Development Kit includes the hardware and software elements required to rapidly optimize the performance of SiC modules and systems.

This new tool enables designers to adjust system performance through software upgrades using the AgileSwitch<sup>®</sup> Intelligent Configuration Tool (ICT) and a device programmer. No soldering required.

The ICT offers configuration of different drive parameters including on/off gate voltages, DC link and temperature fault levels and Augmented Switching™ technology profiles.

Small changes to the Augmented Switching technology profiles can yield dramatic improvements in switching efficiency, overshoot, ringing and short-circuit protection.



# Intelligent Configuration Tool (ICT)

## **Optimize with a Keystroke**

Core Settings	
Control Side Options	Gate Driver Options
Device Rating:	Gate Options
Gate Driver Reset: @Auto O Controller	LO Side Select: O CHI @ CH2
DC Link Voltage Fault:      On Off	Full On Gate Voltage Level (±Vgs): 15 🔍 V
Temperature Fault:	
Temperature Monitor:   Isolated  ONon-isolated	Full Off Gate Voltage Level (-Vgs): .3
Fault Output Active Level: @Low OHigh	Normal Operation
Deed Time: 280 ns v	Teo-Level Turn-Off: @Enabled ODisabled
Auto Reset Time Delay: 5	Teo-Level Turn-Off Voltage: 5.5
DC Link Fault Level: 950	
	Two Level Turn Off Time: 400
Temperature Fault Level: 25 °C ~	DSAT Operation
Actions	Multi Level Turn Off. @Enabled ODisabled
Load Settings	Voltage Level/Slanking Time: 3.0 V = 500 pt ~
Load Settings	
Save Settings	
Compile	First Turn-Off Time: 450 is no
	Second Turn-Off Voltage Level: 0
Configuration Part Number	Second Turn-Off Time: 800
Assembly # Version #	121
Comple	Fault Detection
contra	Under/Over Votage Fault Detection: @Enabled C Disabled

Available for download at www.AgileSwitch.com/program.html

## **Each Kit Includes**

- 3× 2ASC Series Cores
- 1× Module Adapter Board
- 1× ASBK-014 Device Programmer Kit
- 1× ICT Software

# **Kit Part Numbers**

#### ASDAK-2ASC-12A1HP-62

- 3× 2ASC-12A1HP 1200V Core
- 1× 62CA1 1200V 62 mm Module Adapter

## ASDAK-2ASC-17A1HP-62

- 3× 2ASC-17A1HP 1700V Core
- 1× 62CA4 1700V 62 mm Module Adapter

## ASDAK-2ASC-12A1HP-SP6LI

- 3× 2ASC-12A1HP 1200V Core
- 1× SP6CA1 SP6LI Module Adapter

SiC Module not included

Most individual components may be ordered separately Programming kit may differ from shown

## **Compatible SiC Manufacturers**



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