# ALPHA DATA

# ADA-SDEV-KIT2

Datasheet Revision: 1.6
20th May 2020

AD01366-2

## Prime Application

Kintex UltraScale Space Development Kit

## Summary

The ADA-SDEV-KIT2 is a Development Kit for the Xilinx Radiation Tolerant Kintex Ultrascale XQRKU060 Space-Grade FPGA.

Modular design with Industrial XCKU060 in -1 speed grade, XRTC compatible Configuration Module, two FMC Sites, DDR3 DRAM, System Monitoring and reference Space-Grade Power and Temperature Sensing solutions from Texas Instruments.

See http://www.ti.com/tool/ALPHA-XILINX-KU060-SPACE for further details.

## Board Features

- ADM-SDEV-BASE - FPGA Board
- ADM-SDEV-CFG - XRTC Configuration FMC
- Space-Grade Power and Temperature Sensing solutions from Texas Instruments
- FMC+ HPC Interface
- FMC LPC Interface
- XRTC Compatible Configuration FMC Interface
- SODIMM Memory Socket (8GB Fitted)
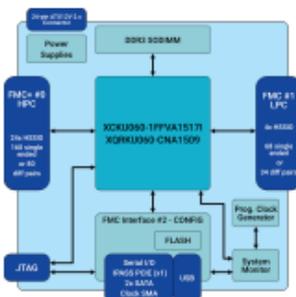
## Target Devices

Xilinx Kintex UltraScale
XCKU060-1-l, XQRKU060-(CA1509)
(1FFVA1517)

LUTs = 221k FFs = 663k DSPs = 2760
BRAM = 38.0Mb(38.0Mb)

3x  PCI Express Gen3 cores

## Application Data Memory

1x 1G x 72 (8GiB) DDR3-1600

## Configuration Memory

QSPI 2x256MB Flash Memory

## Configuration Modes

configured by XRTC compatible Configuration FMC or through JTAG socket on the Configuration FMC

## Deliverables

- ADA-SDEV-KIT2
- One Year Warranty
- One Year Technical Support
- Example Vivado Projects
- Reference Schematics Available

## Board Format

Development Platform

## Input/Output Interfaces

### FMC+ HPC Interface
High-speed Serial IO
Single Ended/Differential Pair I/O

### FMC LPC Interface
High-speed Serial IO
Single Ended/Differential Pair I/O

### XRTC Compatible Configuration FMC Interface
PCI Express x1 Interface
USB Interface
SATA Interfaces
QSPI Flash Interface

## Environmental Specification

| Cooling Option | Operating Temperatures | | Storage Temperatures | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| AC0 | 0°C | 55°C | -40°C | 85°C |

## Environmental Humidity

Up to 95% (non-condensing)

## EMC Standards

FCC 47CFR Part 2
EN55022:2010 Equipment ClassB

| Ordering Information | |
|---|---|
| **Order Code: ADA-SDEV-KIT2/C** | |
| Note | This is the Rev2 assembly, contact sales for other configuration options. For rev1 (ADA-SDEV-KIT) pricing and availability contact sales. |