



## Xilinx - SK-CR11-L-G - CPLD - Starter Kit

### Product Overview:

The Cool Runner™-II Evaluation Board is a complete USB-powered circuit development platform for the Xilinx Cool Runner-II CPLD. The board includes highly efficient power supplies, a user configurable oscillator, several user I/O devices, a real-time current meter, and a USB port for board power and CPLD programming. The board includes five expansion connectors that route 64 signals available from the CPLD to external circuits to expand board capability.



### Kit Contents:

The Cool Runner-II Starter Kit includes:

- Cool Runner-II CPLD evaluation board with an XC2C256-TQ144 device
- USB 2.0 cable for power, programming and data transfer
- 16x2 character LCD
- 9V battery connector for optional battery power
- Quick Start Guide
- ISE Web Pack Software
- Resource CD

### Key Features:

- A 256 macrocell Cool Runner-II CPLD in a TQ-144 package
- An on-board USB port for board power, CPLD programming, and user data transfers
- An on-board three-channel 16-bit  $\Delta$ - $\Sigma$  A/D converter that measures real-time current on VCCINT and the two VCCIO banks during board operation (data is sent to the PC for display via the USB cable)

- A user-configurable silicon oscillator (1000/100/10 kHz), plus a socket for a second crystal oscillator
- 64 I/O signals available on expansion connectors (32 on Pmod connectors; 32 on a parallel connector)
- Pads for an on-board SPI PROM

## Ordering Information:

## Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
SK-CR11-L-G	Xilinx	1670944	19P1156

## Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
XC2C256	Xilinx	CPLD Cool Runner-II	1605830	12N2453
LTC2494	Linear Technology	Delta Sigma ADC	NA	56M5754
LT3028	Linear Technology	Linear Voltage Regulator	1273641	57M8046
LTC6900	Linear Technology	Oscillator	19P2430	1663921

## Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DK-MAXII-1270N	Altera	DEVELOPMENT KIT, MAX II CPLD	EPM1270F256C5	1428132	58M4977
MAX-CPLD PROMO	Altera	DEVELOPMENT BOARD KIT, CPLD BUNDLE	EPM1270F256C5	1526458	74M2963
ATF15XX-DK3	Atmel	KIT, CPLD DEVELOPMENT FOR ATF15XXBE	ATF15xx	1551776	94M6249

## **Document List:**

## **Datasheets:**

Part Number	Description	Size
SK-CR11-L-G	<a href="#">Cool Runner-II Evaluation Board Reference Manual</a>	643 KB
LTC2494	<a href="#">LTC2494 - 16-Bit 8-/16-Channel Delta Sigma ADC</a>	538KB
XC2C256	<a href="#">XC2C256 Cool Runner-II CPLD Datasheet</a>	303KB
LT3028	<a href="#">LT3028 Regulator Datasheet</a>	336KB
LTC6900	<a href="#">LTC6900 Oscillator Datasheet</a>	155KB

## **Application Notes:**

File Name	Size
<a href="#">XAPP058 - Xilinx In-System Programming Using an Embedded Microcontroller</a>	641KB
<a href="#">XAPP104 - A Quick JTAG ISP Checklist</a>	55KB
<a href="#">XAPP317 - Power Evaluation Equation for CoolRunner-II CPLDs</a>	71KB
<a href="#">XAPP336 - Design of a 16b/20b Encoder/Decoder Using a CoolRunner CPLD</a>	344KB
<a href="#">XAPP341 - UARTs in Xilinx CPLDs</a>	27KB
<a href="#">XAPP347 - Decrease Processor Power Consumption Using a CoolRunner CPLD</a>	83KB
<a href="#">XAPP348 - CoolRunner XPLA3 Serial Peripheral Interface Master</a>	147KB

## **Hardware & Software:**

File Name	Size
<a href="#">Cool Runner-II Starter Kit Peripheral Module Bundle</a>	-
<a href="#">Cool Runner-II Starter Kit Quick Start Guide</a>	644KB
<a href="#">Cool Runner-II Starter Kit Product Brief</a>	1.3MB
<a href="#">Free ISE Web PACK</a>	88.8MB