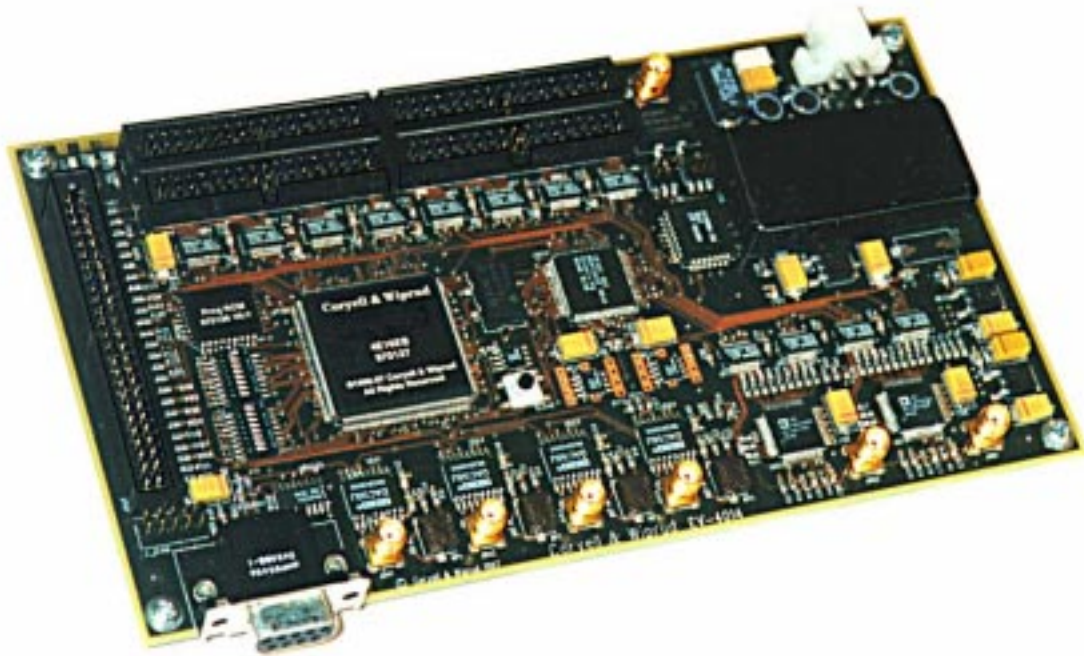


Coryell & Wiprud EV-4014

GC4014 Evaluation Board (4 Channel All Digital Receiver)



EV-4014 Key Features

- 4 Digital Receiver Channels at up to 50 MSPS
- 8 Predefined GC4014 Register Settings
- RS-232 Control & Status of GC4014 Registers
- Four 14 bit Digital Inputs
- Two 12 bit, 41 MSPS A/D Converters
- Dual Built-in CW and Pseudonoise Sources
- Four 16 bit, 600 KSPS D/A Converters
- Four DSP Serial Port Output Interfaces
- TMS320C40 Comm Port Output Interface
- SHARC Link Port Output Interface
- Built-in, External, or Digital Input Clock Sources
- A EV-4014 Quad Receiver Board Can Be Driven by an EV-4114 Quad Transmitter Board
- Custom Tailored Interfaces & Filters Available

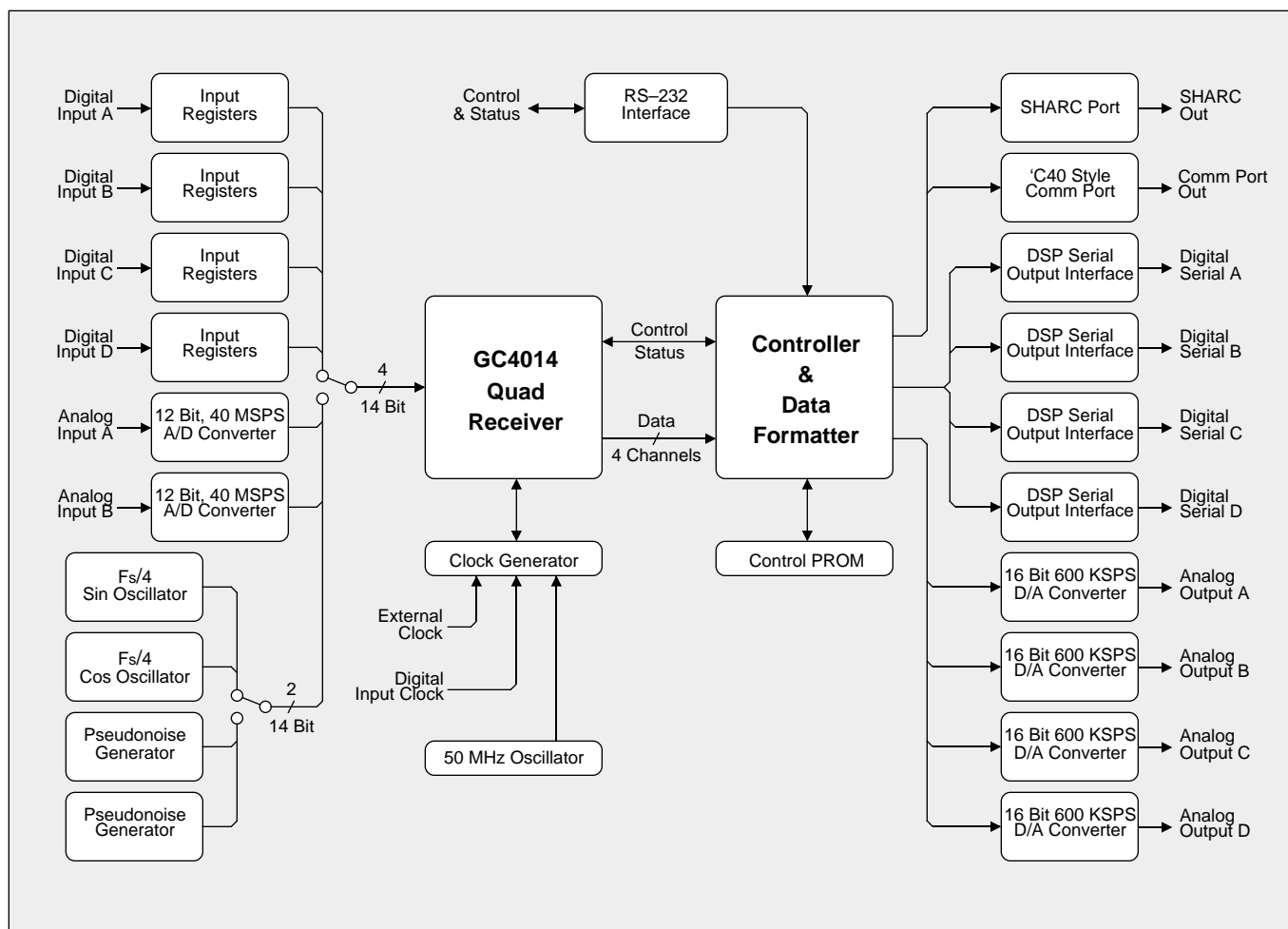
EV-4014 Overview

The Coryell & Wiprud EV-4014 is designed to accelerate the evaluation of Graychip's GC4014 Quad Receiver Chip. The GC4014 can be exercised using a simple test setup consisting of the EV-4014, a spectrum analyzer, and a power supply. One of 8 sets of GC4014 register configurations and a variety of several signal sources are selected by dip-switches.

Further testing may be accomplished using the high speed RS-232 port to program the GC4014 and a variety of analog and digital input and output ports. The EV-4014 can be driven digitally by up to four 14 bit, 50 MSPS digital input ports, 2 analog inputs driving 12 bit, 41 MSPS, analog to digital converters, or dual digital CW or pseudonoise generators. Output signals are monitored using four, 16 bit, 600 KSPS, digital to analog converters, four DSP serial outputs, a 'C40 Comm Port, or a SHARC Link Port. Clocks are derived from one of the digital inputs, an external source, or from an on-board 50 MHz source.

One or more EV-4114 Quad Transmitter Chip Evaluation Boards can be used as signal sources to drive the EV-4014. The EV-4014 and the EV-4114 are a complementary pair of products designed to make your product development faster and easier.

EV-4014 Block Diagram



EV-4014 Dip-Switches

16 dip-switches are provided to control the EV-4014 and the GC4014 without requiring the RS-232 port.

Switch 1: Baud Rate 0	Switch 9: Chan A Digital In Enable
Switch 2: Baud Rate 1	Switch 10: Chan B Digital In Enable
Switch 3: Reserved	Switch 11: Chan C Digital In Enable
Switch 4: Configuration Select 0	Switch 12: Chan D Digital In Enable
Switch 5: Configuration Select 1	Switch 13: Pseudonoise 1 Enable
Switch 6: Configuration Select 2	Switch 14: Pseudonoise 2 Enable
Switch 7: Configuration Select 3	Switch 15: PLL Frequency Select
Switch 8: Configuration Select 4	Switch 16: PLL Bypass

EV-4014 Connectors & Jumpers

The EV-4014 connectors and jumpers are summarized below:

JPower: Power (5V @ 4A)	JIN3: Digital Input 3
JRS232: RS-232 Port	JIN4: Digital Input 4
JBClk: Clock Source Select	JDA1: Analog Output 1
JBFS: PLL Adjust	JDA2: Analog Output 2
JAD1: Analog Input 1	JDA3: Analog Output 3
JAD2: Analog Input 2	JDA4: Analog Output 4
JIN1: Digital Input 1	JOUT: Digital Output (DSP Serial, Comm, Link)
JIN2: Digital Input 2	

For More Information

The EV-4014 manual is available for downloading at our web site (www.coryell-wiprud.com).

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