

# Fast Facts

## RZ2 Z-Series Processor



This fast fact sheet provides basic reference information for the RZ2 Z-Series Processor and related devices. The RZ2 is available with up to eight processors. See the System 3 Manual for more detailed information.

**LCD Screen.** The LCD touchscreen shows information about each DSP, the optical PC interface, the PZ preamplifier and system I/O. Touch a system component to show details for that component.

### Screen Components



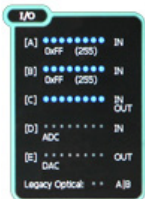
**DSP** Percent cycle usage and data transfer rates [shown in stacked bars]. Details view includes information such as firmware version, sample rate, and memory usage for selected processor.



**Interface** Sync status, zTrigA/B state, current transfer rate to/from PC [shown in stacked bars]. Details view includes information such as total MB data received/sent and transfer errors.



**PZ Amp** Activity/clipping indicators for each channel and battery status. Details view includes amp model, firmware version, and number of channels.



**I/O** Virtual indicator lights:  
  
Digital I/O [24 bits in banks A, B and C]: LED will indicate direction and logic level for each bit. See Digital I/O on reverse for more information.

Analog I/O [8 ch of ADC in bank D and 8 ch of DAC in bank E]: Lights will indicate the signal level, green when a signal is present and red if clipping.

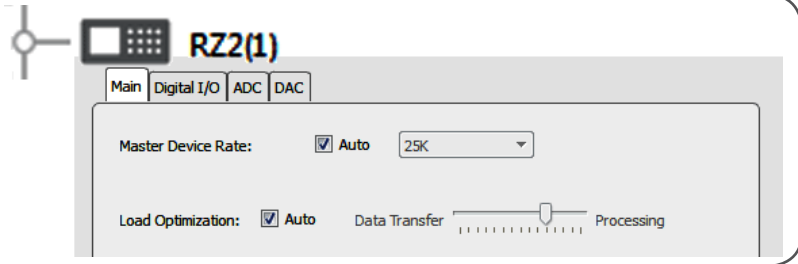
Legacy optical preamplifiers: Flash when no amp is connected and will show the power or clipping status of the connected amplifiers.



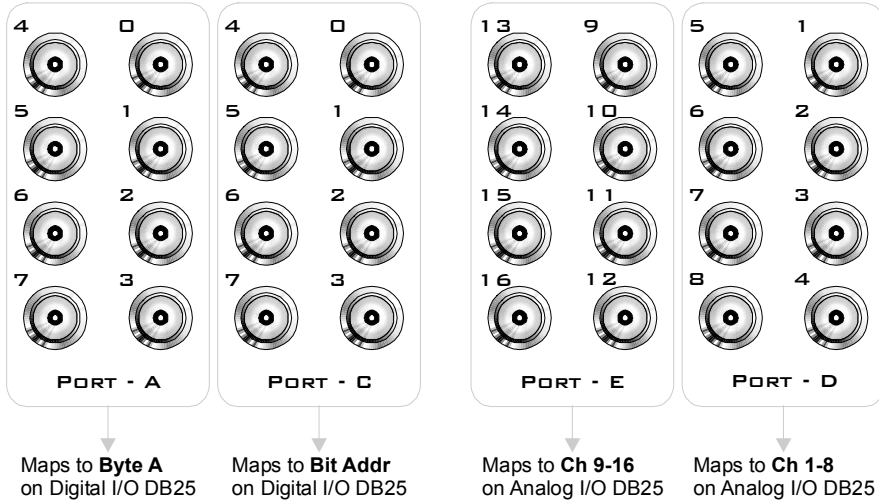
**Info** Serial number, service IP address, and software version.



Digital I/O and front panel ADC and DAC must be enabled and configured on the Synapse RZ2 options pages.



### BNC Channel Mapping

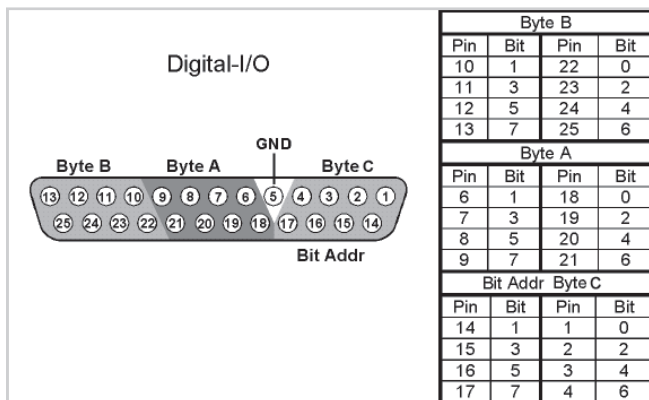


**Digital Input/Output.** Includes 24 bits of programmable digital I/O:

- Port A = bits 0 - 7 [byte addressable], Byte A
- Port B = bits 0 - 7 [byte addressable], Byte B
- Port C = bits 0 - 7 [bit addressable]

Digital I/O lines are accessed via the 25-pin connector on the front of the RZ2. 8-bits of bit addressable I/O and 8-bits of byte addressable I/O [Byte A] are also available from the front panel BNCs.

### DB25 Digital Input/Output Connector Pinouts



### Analog Input

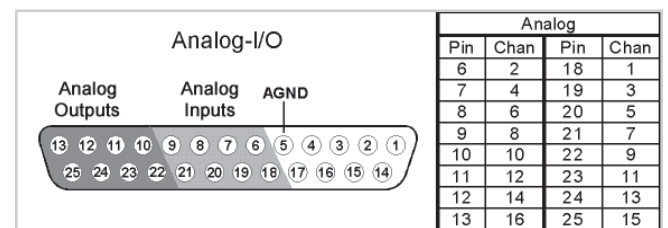
### #Channels

- Front Panel Analog Input[PortD] 8
- Legacy amp-A, Amp-B 16 per Amp
- PZ Amplifier Fiber optic Port up to 256

When using Synapse the appropriate scale factors, conversions, and offsets are applied automatically.

If you aren't using Synapse, see the *System 3 Manual* for important programming notes. For custom circuit design, see the *RPvdsEx Manual*.

### DB25 Analog Input/Output Connector Pinouts



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