High Resolution Digital Pulse Processor
APV8508-14/12Gb(500MSPS)

- ADC 500 Msps, 8 channels, Resolution 14 or 12-bit
- Timestamp 64-bit (Max. 55 month) 7.8 ps LSB
- Throughput 1 Mcps and more / channel (Histogram mode)
  150 kcps and more / 8 channels (List mode)
- Analysis mode List (TDC + QDC etc.), Wave, Histogram, etc.
- Function (Digital) CFD, TDC, QDC, PSA, Coincidence*1
- Interface TCP/IP, Gigabit Ethernet
  Data transfer 20 M Byte/sec and more
- Use example gamma/neutron discrimination and β-ray measurement,
  high-speed / high-resolution scintillator, such as LaBr₃, LYSO, and etc.

List data example (1 event : 112bit, 14byte)

<table>
<thead>
<tr>
<th>Event#1</th>
<th>Event#2</th>
<th>Event#N</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td>96</td>
<td>80</td>
</tr>
<tr>
<td>PSA_F[15..0]</td>
<td>PSA_S[15..0]</td>
<td>TDC[63..0]</td>
</tr>
<tr>
<td>PSA_F[15..0]</td>
<td>PSA_S[15..0]</td>
<td>TDC[63..0]</td>
</tr>
<tr>
<td>PSA_F[15..0]</td>
<td>PSA_S[15..0]</td>
<td>TDC[63..0]</td>
</tr>
</tbody>
</table>

Specifications

- Analog signal input variety PMT anode signal, Fast-NIM signal, etc.
- Analog input range ±1V *1 (Input impedance : 50Ω)
  (LEMO 00 series connector x8)
- Analog gain switch x1 / x3 *1
- Analog DC offset fix ±1V
- Analog signal rise time Less than 2ns
- Digital CFD Threshold, Function, Walk, Delay *Controlled by PC
- Digital QDC Integral time 8ns～4000ns
- Digital PSA FAST / SLOW
- External Input / Output terminal (TTL level) CLK input, CLK output, GATE input, VETO input, CLR input,
  OR output (LEMO 00 series connector x6) *1
- External dimensions (Unit: mm), Weight VME1U 20(W) × 262(H) × 187(D), About 460g

*1 Added option, Specifications modifiable.

TechnoAP
Design and fabrication of electronic circuit associated
with measurement control and radiation measurement

TechnoAP Co., Ltd.
☎ +81-29-350-8011
☎ +81-29-352-9013
2976-15 Mawatari, Hitachinaka-shi, Ibaraki, 312-0012, Japan
http://www.techno-ap.com
order@techno-ap.com
20180615

*Images is for illustration purpose.
*Please note that contents may change without prior notice.