

- 2/4/8 channel synchronous sampling
- 100/125Msps per channel, 16bit
- Input bandwidth DC-50/60MHz
- Input range: can be set as $\pm 1V$ 、 $\pm 2V$ 、 $\pm 5V$ 、 $\pm 10V$
- Input impedance: $50\Omega/1M\Omega$
- PCIe x8 Gen2 communication interface
- support FPGA secondary development
- Software development package supports C/C++ ,
LabVIEW, Matlab etc



| Series | Bus | Resolution | Channel | Sampling Rate | Bandwidth | Storage depth | System support |
|-------------|--------------|------------|---------------|---------------|-------------|---------------|------------------|
| LD815x-xx16 | PCIe x8 Gen2 | 16bit | 2/4/8 channel | 100/125Msps | DC-50/60MHz | 1GB | Windows Linux |

Brief introduction

- LD815x-xx16 is Mysoow's "Agile" series PCIe acquisition card, supporting 2/4/8 channel, 16bit , achieving 100/125Msps synchronous sampling , On board DDR3 memory granules, with 1GB storage volume, larger volume customization is also supported.
- PCIe x8 Gen2 bus interface, supporting the data speed up to 20Gbps.
- Support multiple triggering modes including hardware , triggering, software triggering and manual triggering etc. Continuous sampling mode is also supported.
- Support the secondary development for users, providing DLL dynamic link pool.
- Equipped with host computer Demo software, supporting the configuration of board and real-time display and storage of data.

Typical applications

- Optical Coherence Tomography (OCT)
- Non-destructive detection
- Ware form recorder
- Multi-channel transient recorder

Detailed parameters

| | | | | | | |
|------------------------------|--|-----|-------|------|------|--|
| Terminal | | | | | | |
| Simulated input | 2/4/8 channel, standard SMB interface, SSMA optional | | | | | |
| Triggered input | 1 way SMB | | | | | |
| Triggered output | 1 way SMB | | | | | |
| Synchronous clock input | 1 way SMB | | | | | |
| Synchronous clock output | 1 way SMB | | | | | |
| Communication bus | PCIe x8 Gen2 | | | | | |
| Acquisition system | | | | | | |
| Resolution | 16bit | | | | | |
| Bandwidth | DC-50/60MHz | | | | | |
| Input channel | 2/4/8 channel synchronous sampling | | | | | |
| Sampling rate | up to 100/125Msps | | | | | |
| Sampling mode | Continuous sampling, finite point sampling | | | | | |
| Full range input scope | ±1V、±2V、±5V、±10V | | | | | |
| Input coupling | AC/DC coupling | | | | | |
| Input impedance | 50Ω/1MΩ | | | | | |
| Extreme input | ±40Vmax | | | | | |
| Storage | | | | | | |
| Storage volume | 1GB | | | | | |
| Recording capability | Can be set up by software, the overall volume does not exceed memory space | | | | | |
| Trigger depth | Can be set up by software, the overall volume does not exceed memory space | | | | | |
| Index parameter | | | | | | |
| Input impedance | Gear | SNR | SINAD | SFDR | ENOB | Test conditions |
| 50Ω | ±2V | 72 | 72 | 75 | 11.5 | Input signal amplitude-1dBFS, frequency 10MHz, sampling rate 100/125Msps |
| 1MΩ | ±2V | 70 | 70 | 72 | 10.9 | |
| Trigger Input System | | | | | | |
| Trigger source | Software trigger, threshold(channel) trigger, external(simulation and digital) trigger | | | | | |
| Channel number | 1 channel, supporting simulation and digital TTL, LVTTTL, Input impedance 1MΩ | | | | | |
| Trigger input level | Simulation input ±0.2V~±5V, standard digital TTL, LVTTTL level, square wave/pulse wave/trapezoidal wave | | | | | |
| Trigger frequency | ≤2MHz | | | | | |
| Trigger mode | post-trigger, pre-trigger, delay-trigger, rising edge trigger, falling edge trigger, double-sided edge trigger | | | | | |
| Trigger threshold adjustment | ±0.2V~±5V precisely adjustable | | | | | |

| | |
|--------------------------------|---|
| Trigger input width | ≥50ns |
| Trigger delay | 0~2 ³¹ sampling cycle |
| Trigger output | |
| Trigger output channel | 1 channel, share terminal with clock output |
| Trigger output level | LVTTL, output current 10mA |
| Trigger output width | ≥50ns, adjustable pulse width |
| Clock system | |
| Clock source | Internal/external/external direct sampling clock source |
| Feature of internal clock | 10MHz, ±2ppm |
| External input clock amplitude | 0.4Vpp ~ 3.3Vpp sine wave or square wave |
| External input impedance | 50Ω |
| External input coupling mode | AC coupling |
| External input frequency range | 10MHz, 10MHz~maximum sampling rate@external direct sampling mode |
| Clock output | 10MHz@LVTTL, same source as sampling clock |
| Power requirements | |
| Power supply mode | PCIe insertion socket power supply, 5557-2×3P connector power supply |
| Power requirement | 12V/2A |
| Size and weight | |
| Size | Standard full height & full length PCIe board, occupying 1 bit PCIe insertion socket, length×width×height: 180×20×111mm |
| Weight | ~0.4kg |
| Environment parameters | |
| Working temperature | 0°C ~ +50°C |
| Relative working humidity | 10% ~ 90%RH, no condensation |
| Storage temperature | -40°C ~ +85°C |
| Relative storage humidity | 5% ~ 95%RH, no condensation |

System requirements

- 1> PCIe x8 Gen2 interface;
- 2> larger than 4GB memory, 1GB hard-disk space;
- 3> Display screen resolution larger than 1280×1024;
- 4> Operation system supports Windows, Linux and domestically produced operation system;

Software Development Package

Provide software development package to help users to quickly accomplish application development and integration. MSDK software development package is applicable for Windows, Linux and other operation system, supporting the secondary integration and development for C/C++, Matlab, Labview, Python, C#, QT and other software, including host computer software, interface pool, DEMO routine and development description documents etc.

Ordering information

| Ordering Information | |
|----------------------|--|
| Model | Description |
| LD8152-100M16 | 2 channel 16bit, 100Msps, PCIe x8 Gen2, bandwidth DC-50MHz |
| LD8152-125M16 | 2 channel 16bit, 125Msps, PCIe x8 Gen2, bandwidth DC-60MHz |
| LD8154-100M16 | 4 channel 16bit, 100Msps, PCIe x8 Gen2, bandwidth DC-50MHz |
| LD8154-125M16 | 4 channel 16bit, 125Msps, PCIe x8 Gen2, bandwidth DC-60MHz |
| LD8158-100M16 | 8 channel 16bit, 100Msps, PCIe x8 Gen2, bandwidth DC-50MHz |
| LD8148-125M16 | 8 channel 16bit, 125Msps, PCIe x8 Gen2, bandwidth DC-60MHz |

Note:

The product is not equipped with coaxial cables by default, and our company can provide customized wire services

Chengdu Mysoow Electric Co.,LTD

Tel: +86-028-87409729

Whats: 8617348137889

Wechat: 17348137889

E-Mail:marketing@mysoow.com

Address: 1st Floor, Building B, No. 3 Tianhong Road,
High-tech West District, Chengdu, Sichuan Province, China

Website: www.mysoow-global.com