

PCIe-FRM21

HD-SDI Frame Grabber with PCI Express Interface



INTRODUCTION

The PCIe-FRM21 is a PCI Express board having the function of processing the frame data received from HD-SDI(High Definition Serial digital Interface) and save the data in the system's main memory.

GENERAL DESCRIPTION

- ◆ PCI Express V1.0 Compatible
- ◆ PCI Bus Master Operation
- ◆ Support 1-CH HD-SDI Camera Input
- ◆ Full HD(1920x1200) Resolution support

APPLICATION

- ◆ Interface for CCTV & DVR
- ◆ Image Acquisition (Pattern, Particle etc)
- ◆ Inspection Equipment (Sensor, Semiconductor, Device etc)
- ◆ Security Solution (CCTV Surveillance Cameras)
- ◆ Broad-casting

SOFTWARE

■ Operating System

- Windows 2000/XP/7/8/10 (32/64bit)

■ API

- Interface with Application through client DLL

SPECIFICATION

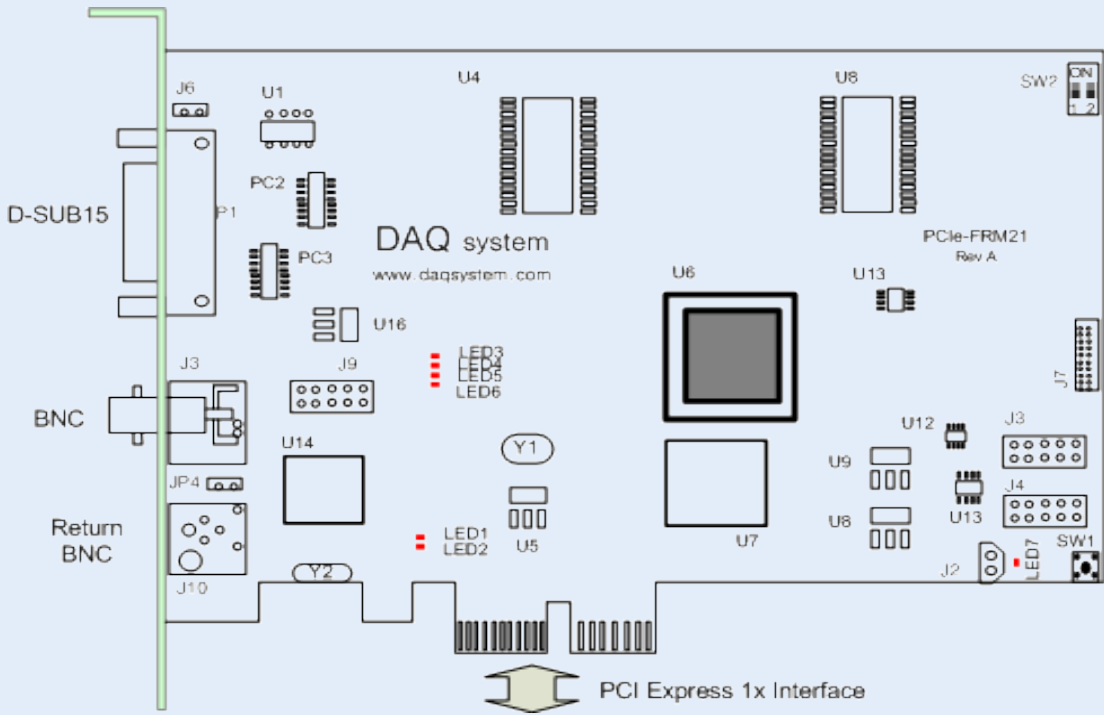
■ Features

- PCI Express 1x Interface
- 128MByte DDR SDRAM Memory
- YUV 10bit Image frame Data Acquisition
- 250m at 1.485Gb/s(Belden 1694A cable)
- YUV4:2:2 10bit Data Acquisition
- Full-HD(1080p) 12frame Acquisition

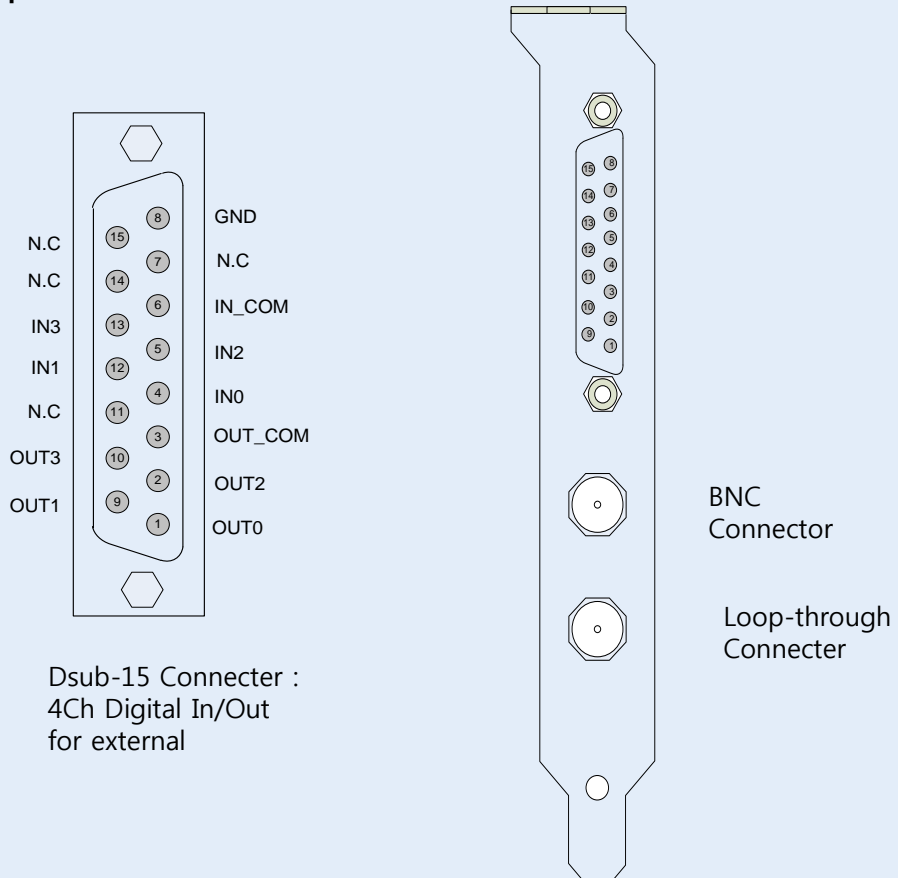
■ Functions

- All of the board functions are controlled by the logic program of the FPGA.
- 4Ch Digital In/Out(Optional) for external
- Loop-Through Output(Optional)

■ Board Feature



■ Connector Map



PHYSICAL/ENVIRONMENTAL

■ **From Factor**

- PCI express 1x

■ **Dimension**

- HD-SDI Camera : Canare BNC connector
- External I/O Connector : D-SUB 15pin
- Dimension (not including connectors) : 130mm x 106 mm

■ **Temperature**

- 0 to 60°C, Operating
- -20 to 80°C Storage

■ **Relative Humidity**

- 5 to 95%, Non-considering

■ **Power Requirement**

- 3.3V Single Power Operation at Max. 300mA

BLOCK DIAGRAM

