USB3-FRM13-B

Base Configuration Camera-link Frame Grabber Board

INTRODUCTION

The USB3-FRM13_B interworks with the Camera Link Camera, it is a board already transmitting a frame to PC to USB3.0 Super Speed (5Gbps) methods.

GENERAL DESCRIPTION

◆ Support Camera Link Camera
◆ USB 3.0 Specification Host Interface
◆ Supports PoCL (Power over Camera Link)
◆ Power by type-B connecter for power(5V) or External 12V DC Power
◆ Super Speed Device 5Gbps
◆ 256MByte DDR2 (128MB x 2)

APPLICATION

◆ Black and White, Color Image Display
◆ Image Acquisition (Pattern, Particle etc)
◆ Inspection Equipment (Sensor, Semiconductor, Device etc)
◆ Medical Image Capture (X-ray, Supersonic)

SPECIFICATION

▣ **Features**

▪ USB 3.0 Specification
▪ Super Speed(5Gbps) device
▪ Supports USB3.0 specification type B Connecter
▪ Maximum camera link data rate : 85MHz

▣ **Functions**

▪ PoCL (Base Connector)
▪ All of the board functions are controlled by the logic program of the FPGA.
▪ Support 1-CH Camera Link Base Configuration
▪ A,B,Z phase RS422 signal input
▪ Line Trigger input
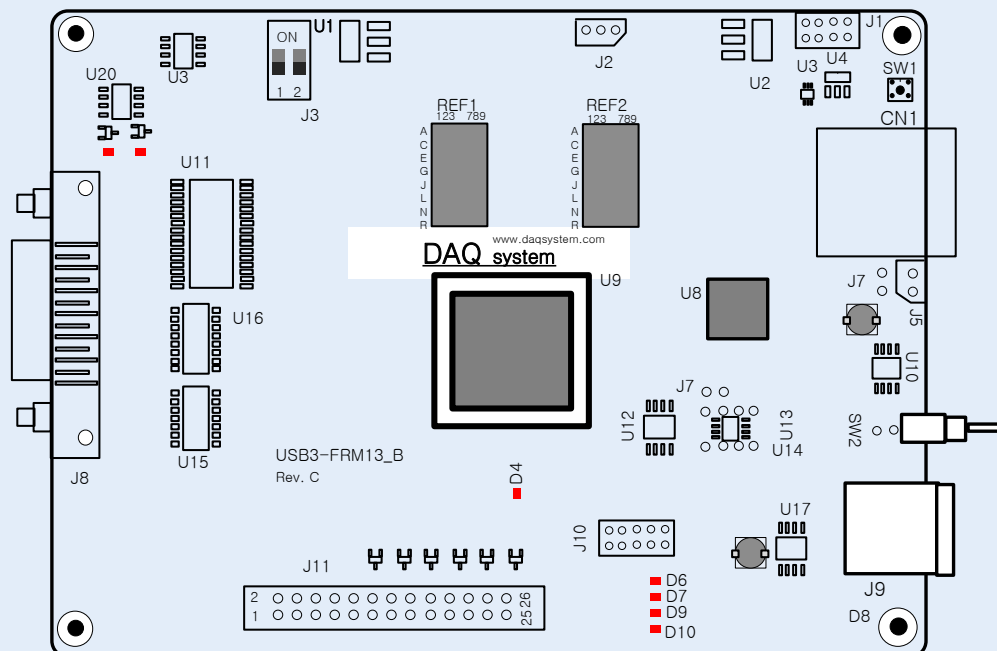▪ Line Trigger Output

SOFTWARE

▣ **Operating System**
▪ Windows 2000/XP/7/8/10 (32/64bit)
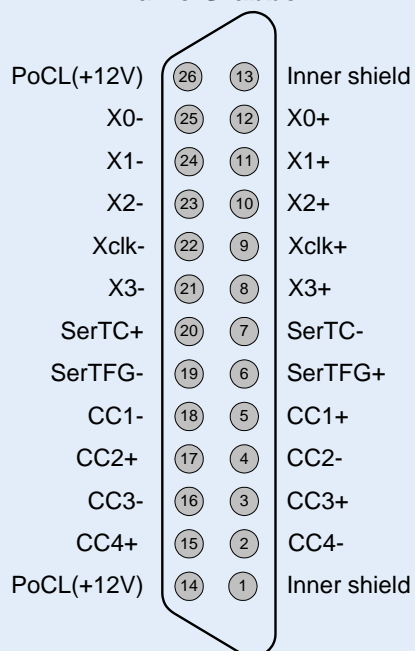
▣ **API**
▪ Interface with Application through client DLL

◙ Board Feature

USB3-FRM13_B Board

◙ Connecter Map

Frame Grabber

PoCL(+12V)	26 — 13	Inner shield
X0-	25 — 12	X0+
X1-	24 — 11	X1+
X2-	23 — 10	X2+
Xclk-	22 — 9	Xclk+
X3-	21 — 8	X3+
SerTC+	20 — 7	SerTC-
SerTFG-	19 — 6	SerTFG+
CC1-	18 — 5	CC1+
CC2+	17 — 4	CC2-
CC3-	16 — 3	CC3+
CC4+	15 — 2	CC4-
PoCL(+12V)	14 — 1	Inner shield

Base Camera Link : J8

PHYSICAL/ENVIRONMENTAL

◉ **From Factor**
  - USB3.0

◉ **Dimension**
  - Camera Interface : Camera Link
  - Dimension (not including connectors) : 110mm x 80 mm

◉ **Temperature**
  - 0 to 60℃, Operating
  - -20 to 70℃ Storage

◉ **Relative Humidity**
  - 5 to 95%, Non-considering

◉ **Power Requirement**
  - Power Supply through USB(Max. 500mA)
  - 12V (Max. 1A)

BLOCK DIAGRAM

USB3-FRM13_B