

Extreme USB V1.1

User Manual



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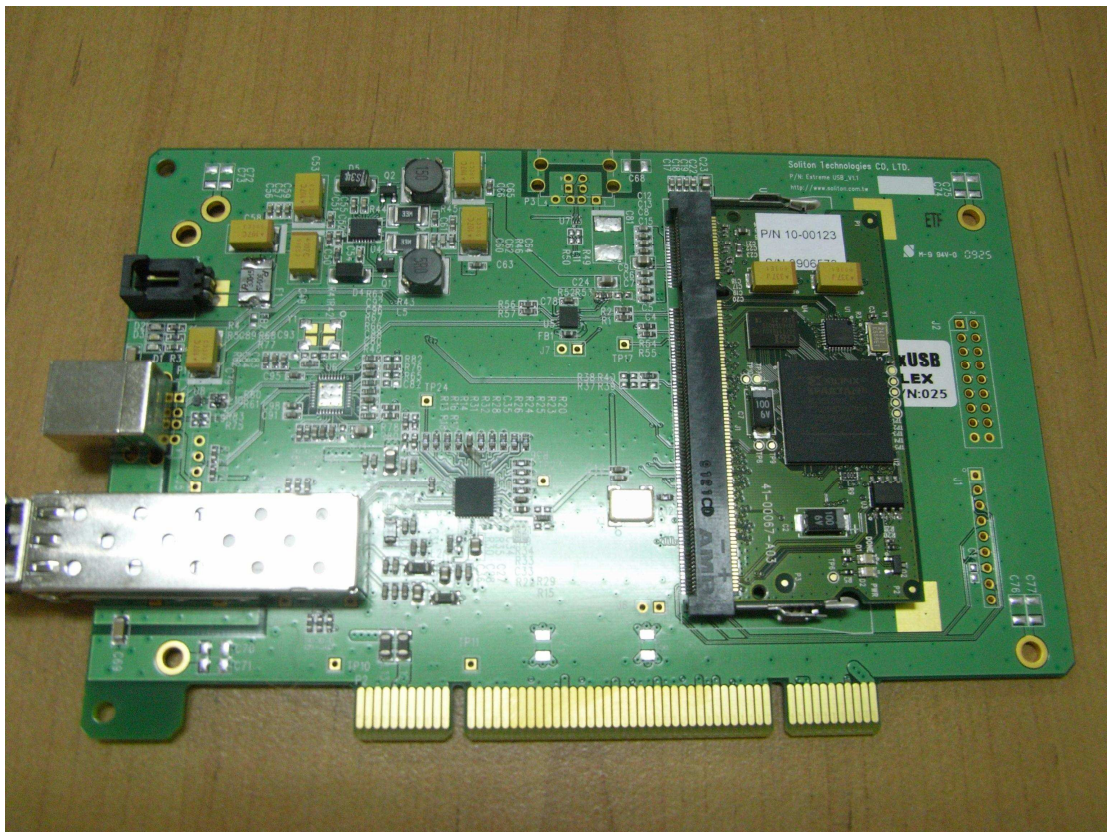
Introduction

ExtremeUSB 2.0 Extend card was developed to enable USB 2.0 connections to extended beyond the desktop, breaking through 5m cable length limitation. ExtremeUSB enables a plug and play solution that does not require any new software drives for operation. The ExtremeUSB 2.0 is suitable for media communications, industrial control, security, medical and remote desktop applications.

Hardware contents

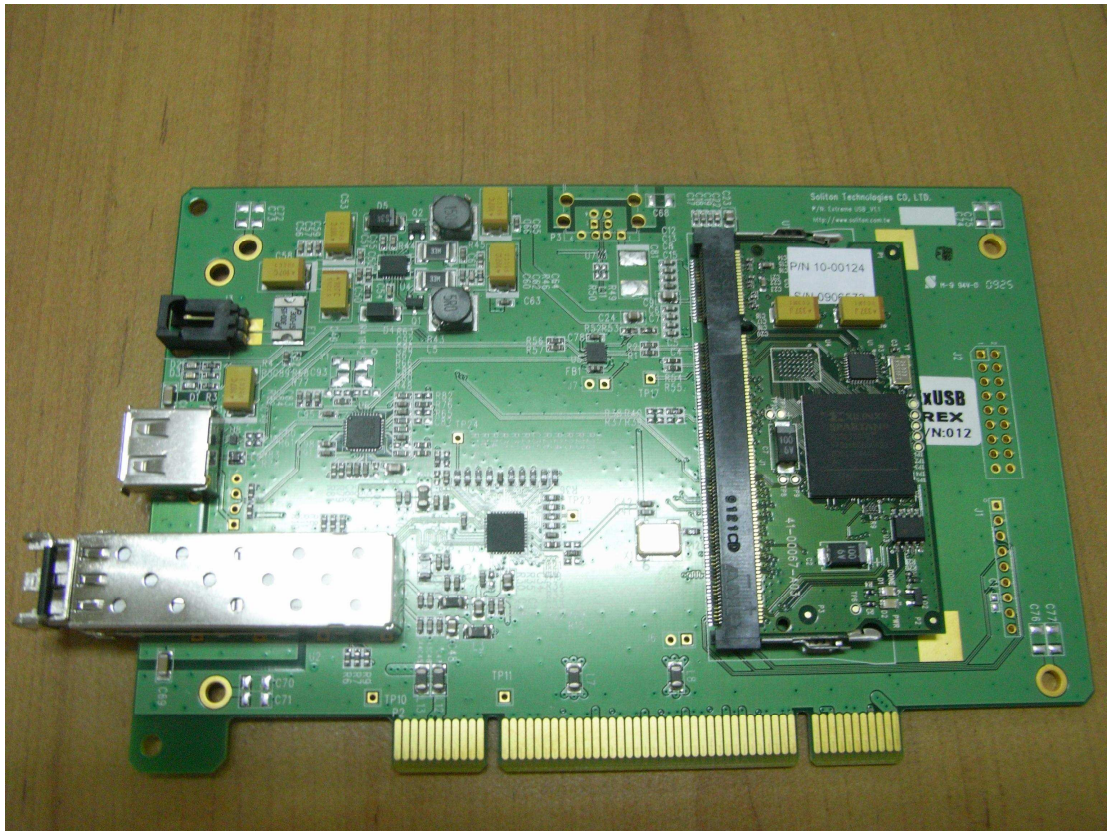
1. LEX

Figure 1



2. REX

Figure 2



3. Fiber optic cable.

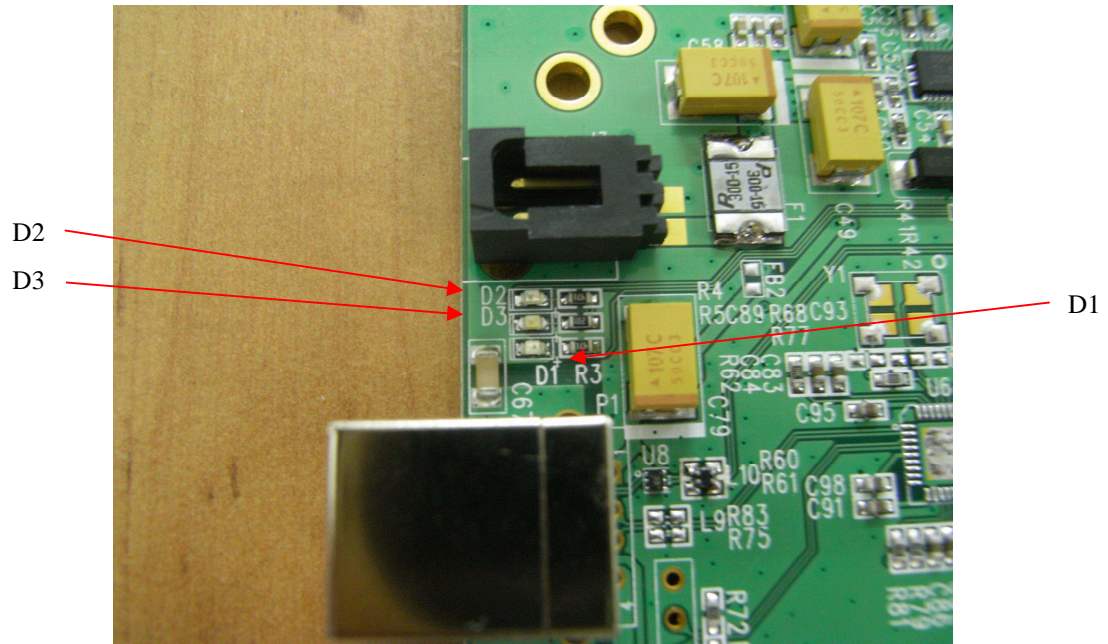
Figure 3



LED Indicators

ExtremeUSB Board LED location.

Figure 4



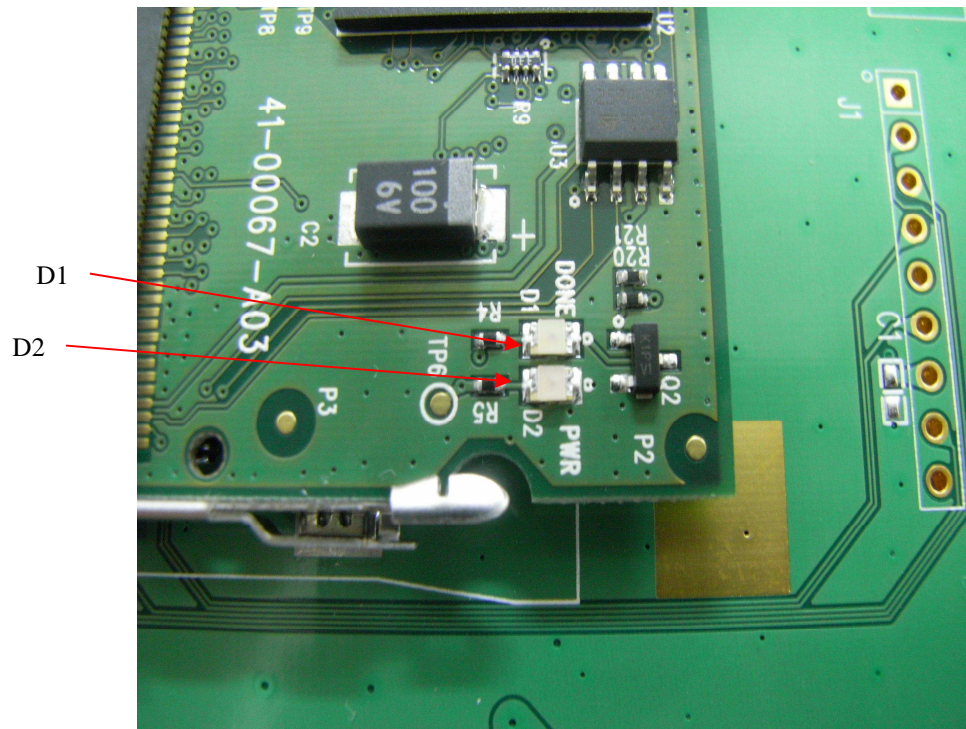
ExtremeUSB LED Function

Table 1.

LED	Type	Description
D1(RED)	Host	Indicates the system has enumerated correctly on the host PC.
D2(GRN)	Link	Indicates the ExtremeUSB link has been established LEX and REX units.
D3(YEL)	Activity	Indicates activity on Fiber port. Blinks intermittently when data is transmitted between LEX and REX.

ICRON2100 Module LED Location.

Figure 5



ICRON2100 LED Function

Table 2.

LED	Type	Description
D1	Done LED	On when 3.3V is supplied to the Core. Off when no power is supplied.
D2	POWER LED	LED turns on when FPGA code is successfully loaded from SPI Flash.

Hardware Test Setup

Hardware Required:

1. LEX PCBA
2. REX PCBA.
3. Fiber optic cable.
4. USB Type B to A cable, 2 pairs
5. USB Extended HDD
6. Power Supply, or Soliton's PTS-7 for powering from PCI card edge

Figure 6: USB Extended HDD



Figure 7: PTS-7



Test Setup Diagram

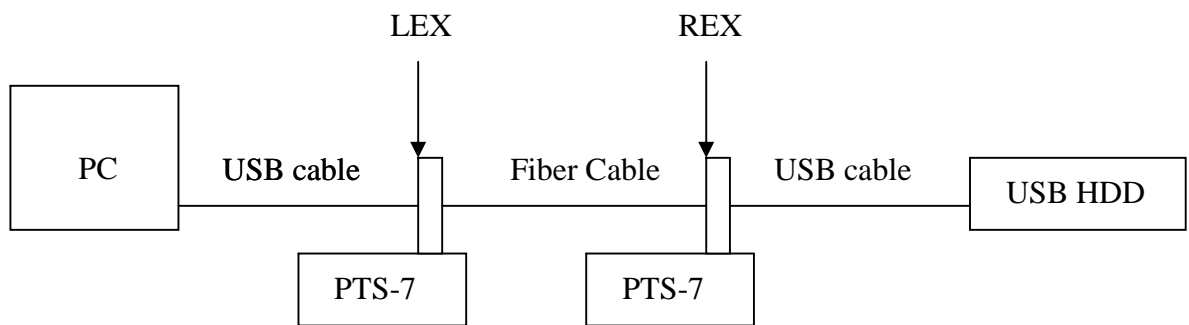


Figure 8: Test Hook Up



Hardware Test Flow

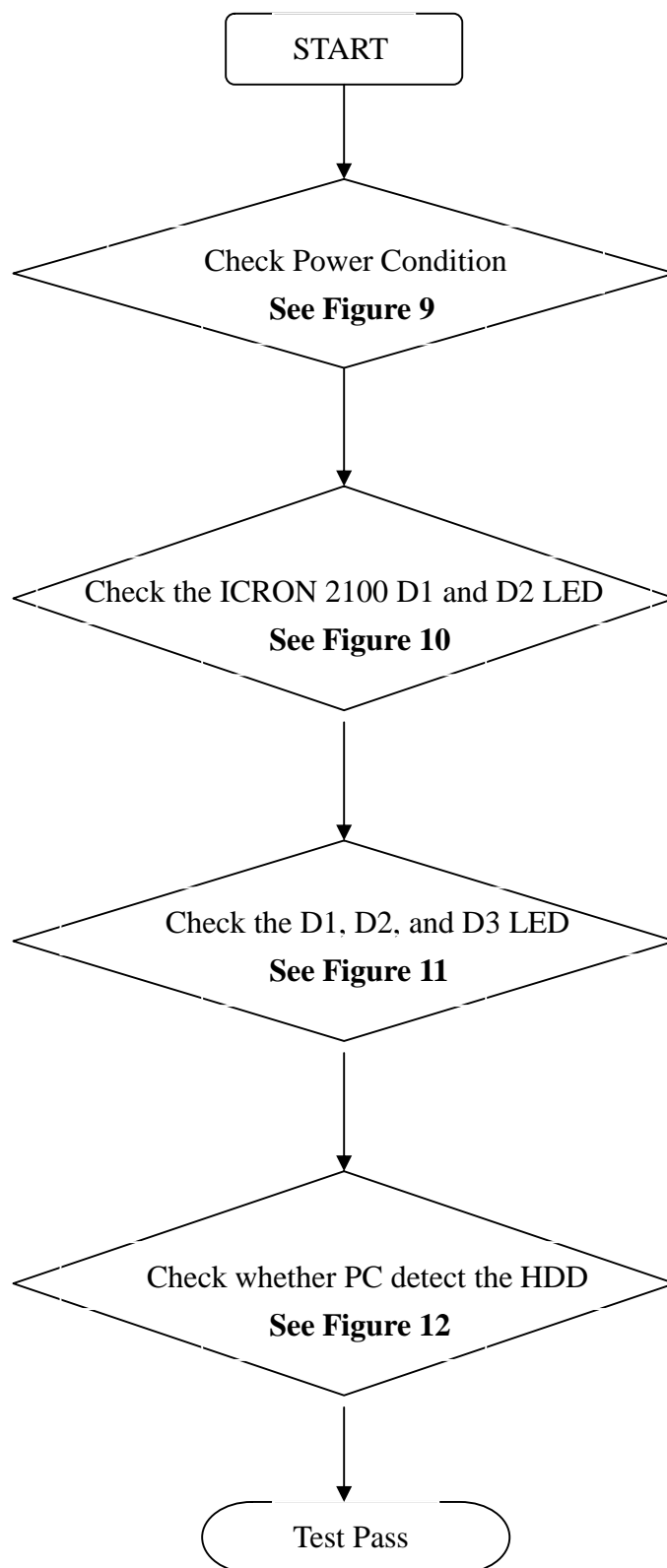


Figure 9: Check Power Status

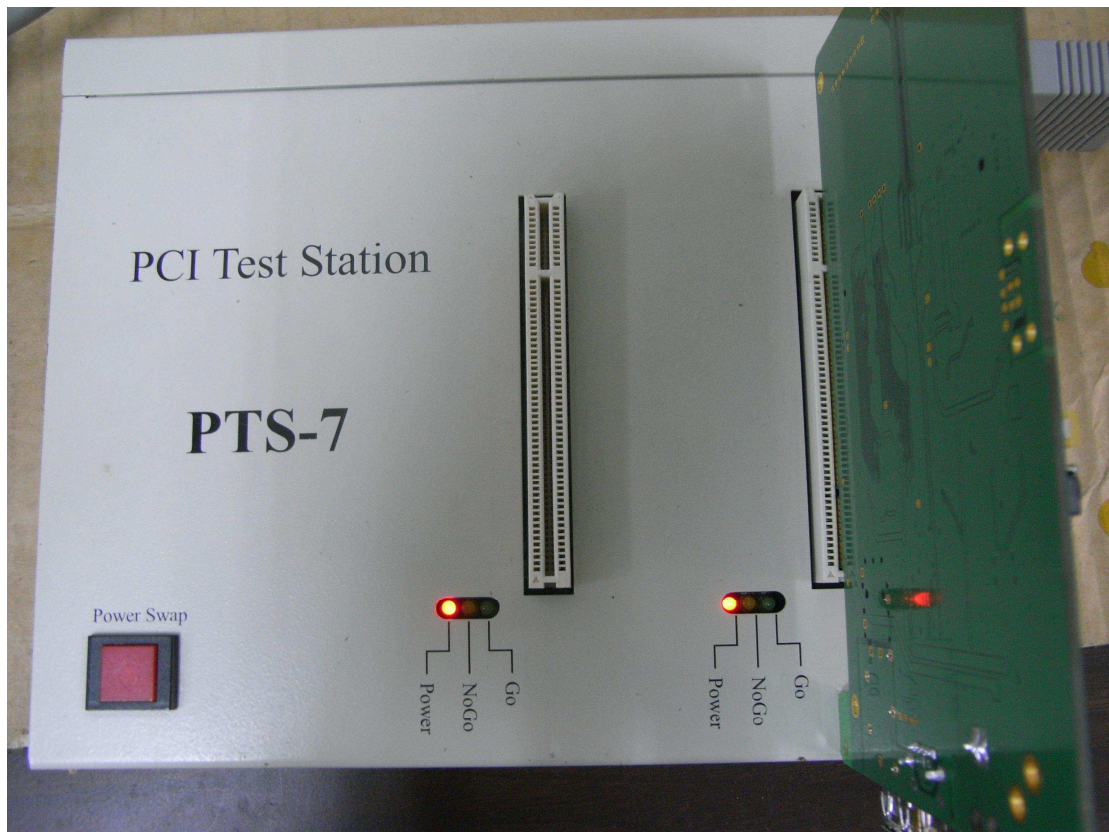


Figure10: Check iCron's module, see if the FPGA are configured properly.

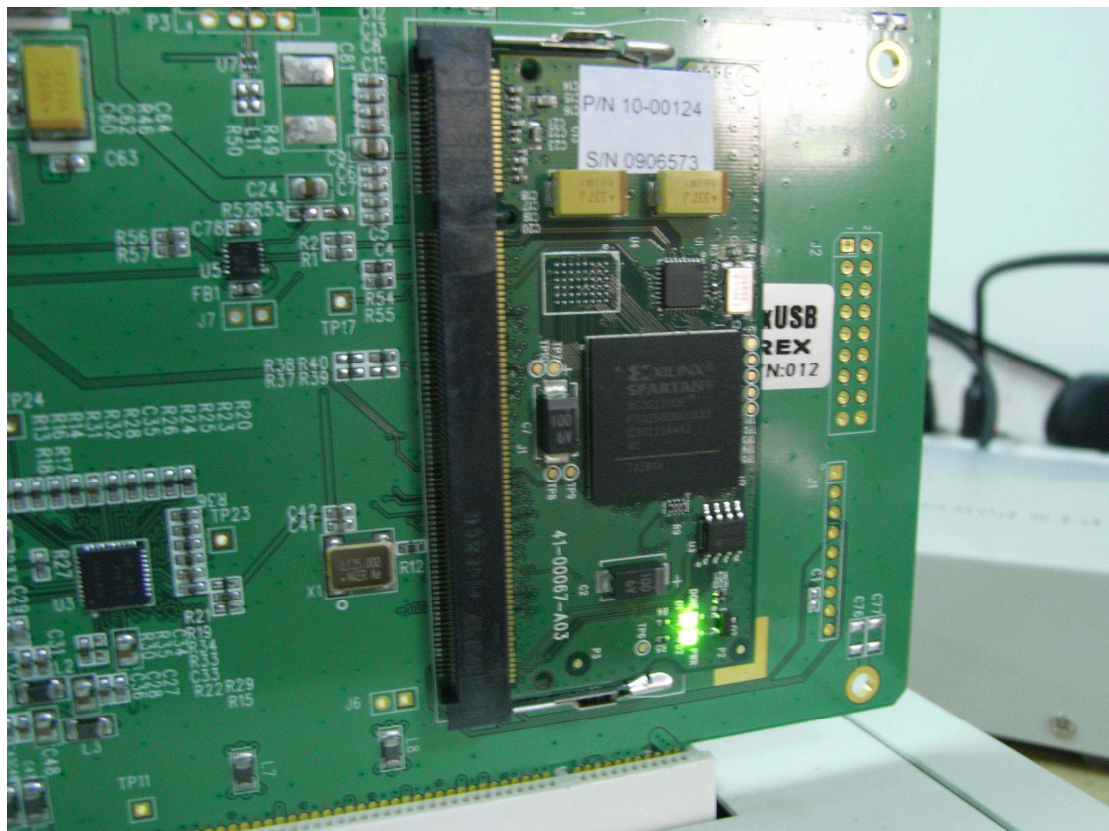


Figure 11: Check the LEDs on both LEX and REX PCBA.

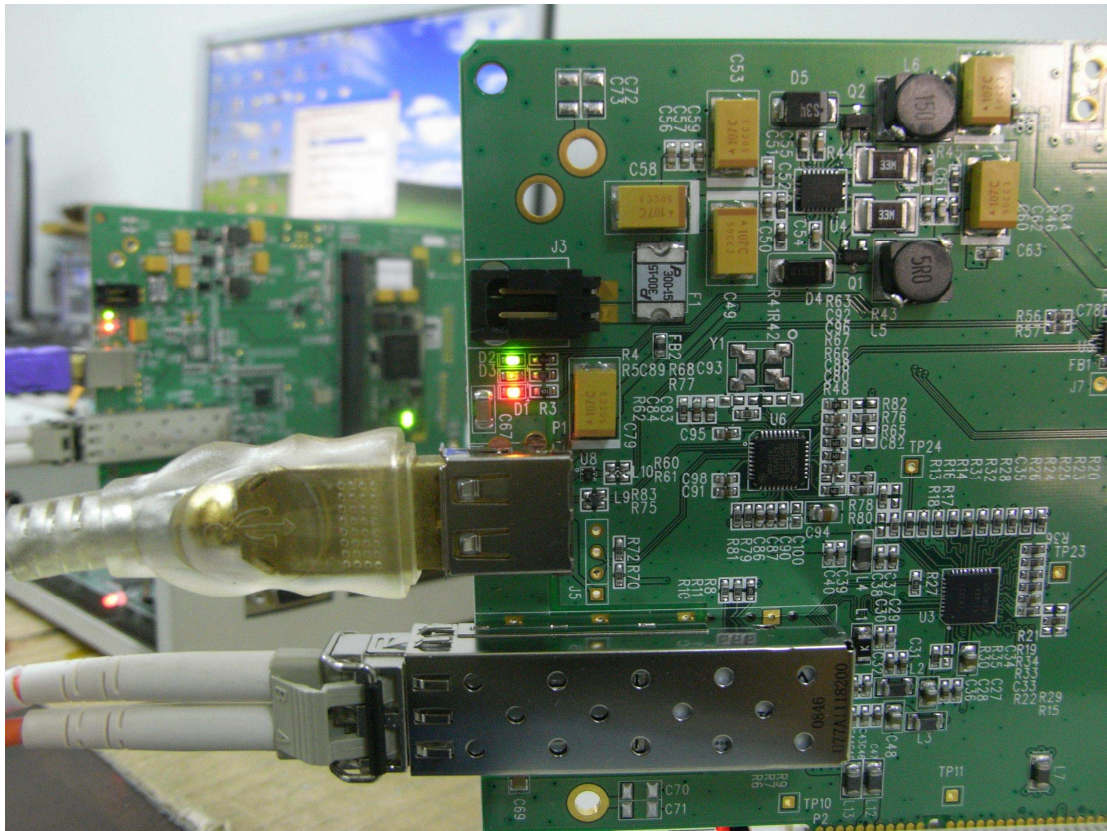


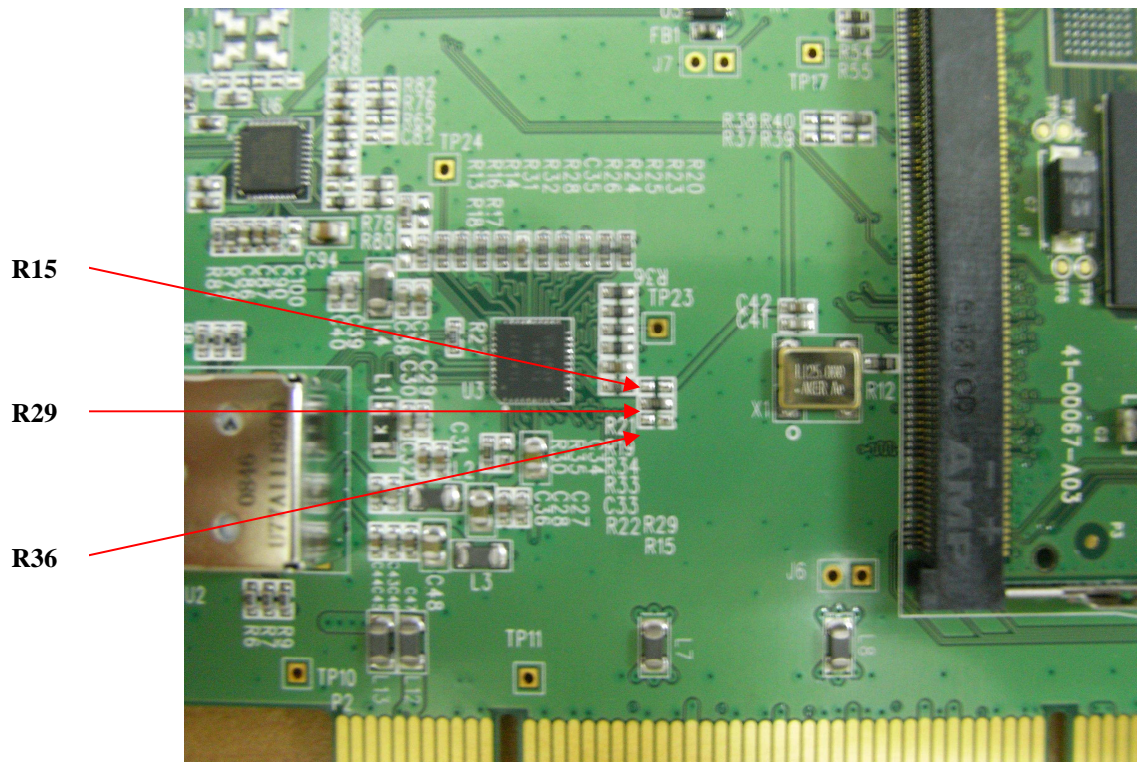
Figure 12: If all modules working properly, the host PC should detect the HDD.



Rework Note

1. The P1.B59 and P1.A59 are shorted with +5V. Should isolate these 2 pins from +5V rail.
2. Reference designator R15, R29 and R36 on top-silkscreen are mis-placed, as follows;

Figure 13



Troubleshooting

1. If the Icron2100's D2 LED is off, please check (A) Each power rail, +5V, +3.3V, +2.5V and +1.2V. (B) Mini PCI slot soldering.
2. If the Icron2100's D2 LED is on and D2 is off, please exchange the Icron2100 module.
3. If both D1 and D2 on ExtremeUSB cards are off. Please check (A) Optical cable connection (B) Change the SFP module.

Technical Support

For further information, please reach us at:

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