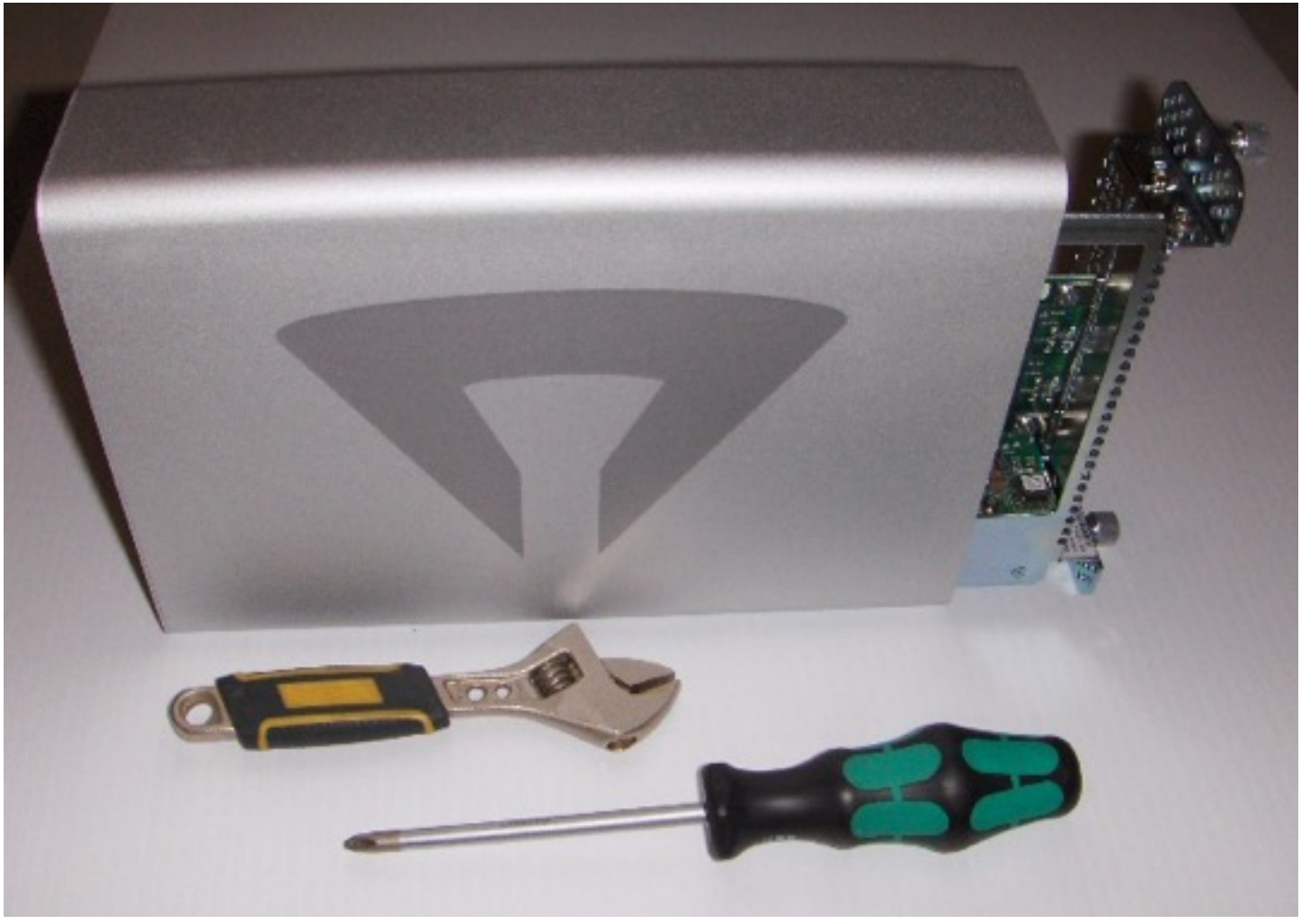
Synclavier® 3

Thunderbolt-1 and BTB-1 Assembly

Version 1.00

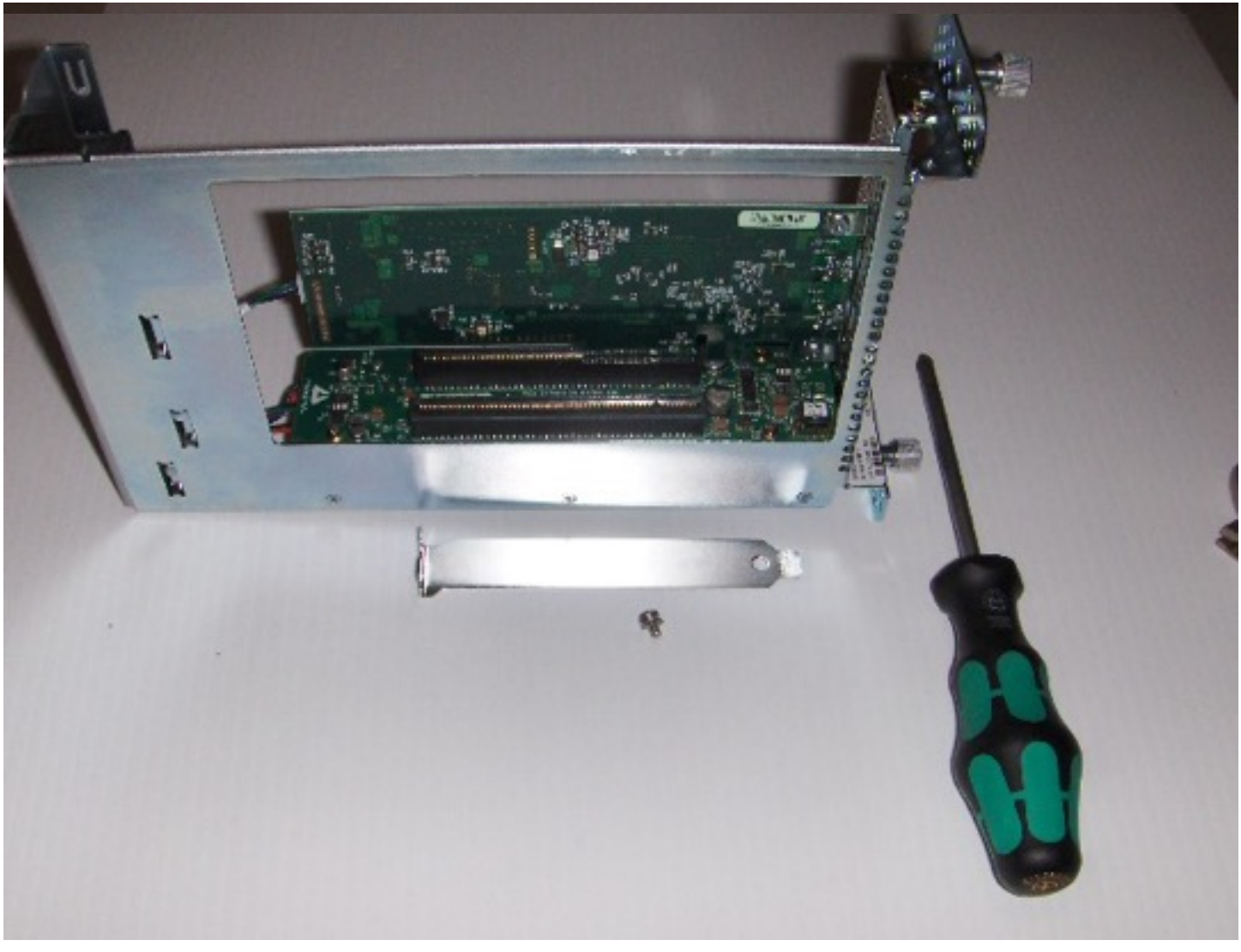
February 15, 2015

Disassemble the Thunderbolt-1 Chassis



A 3/16” socket would be better than the adjustable wrench.

Remove the blank PCI card bracket; save the screw

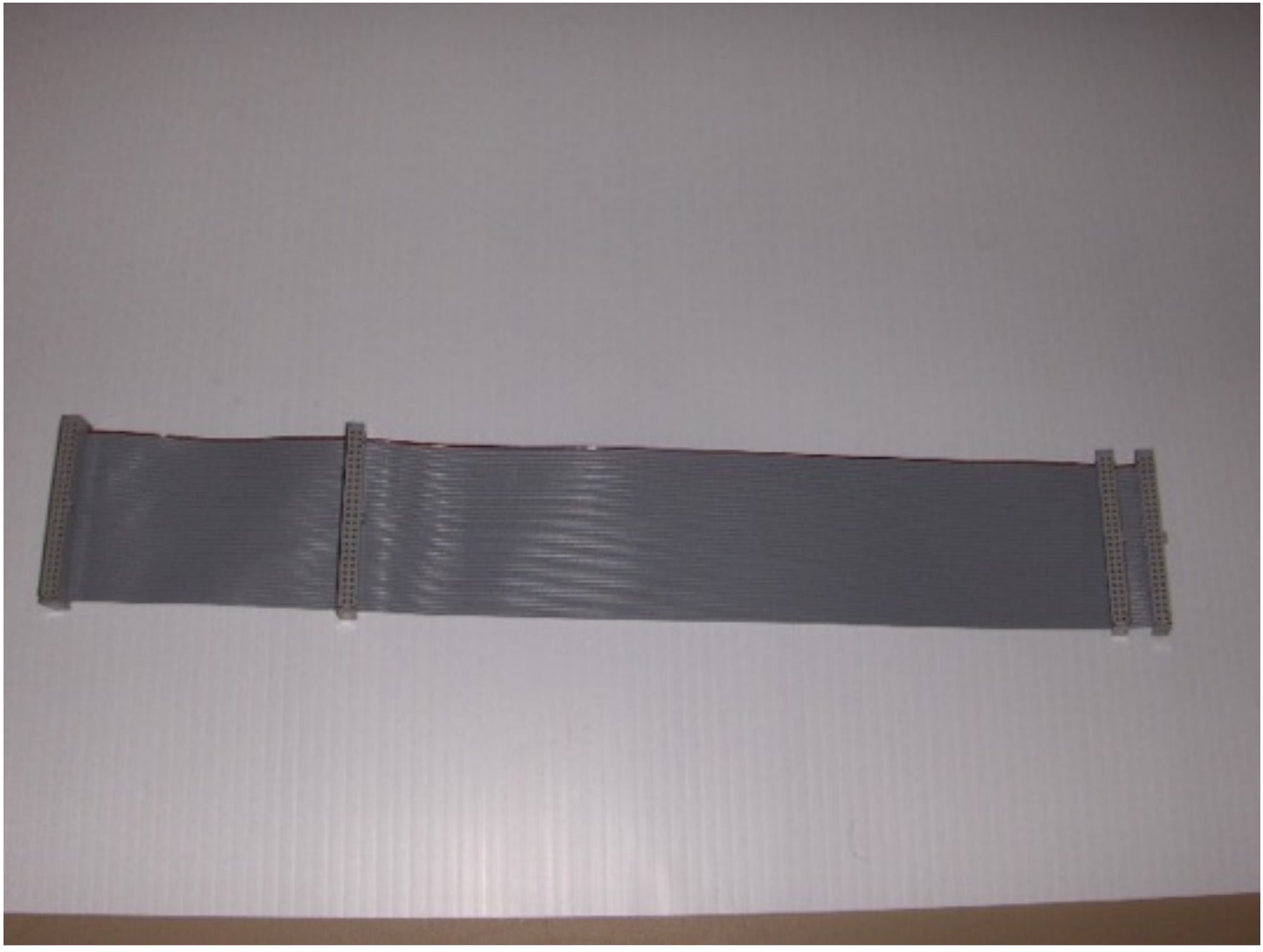


You can discard the blank bracket.

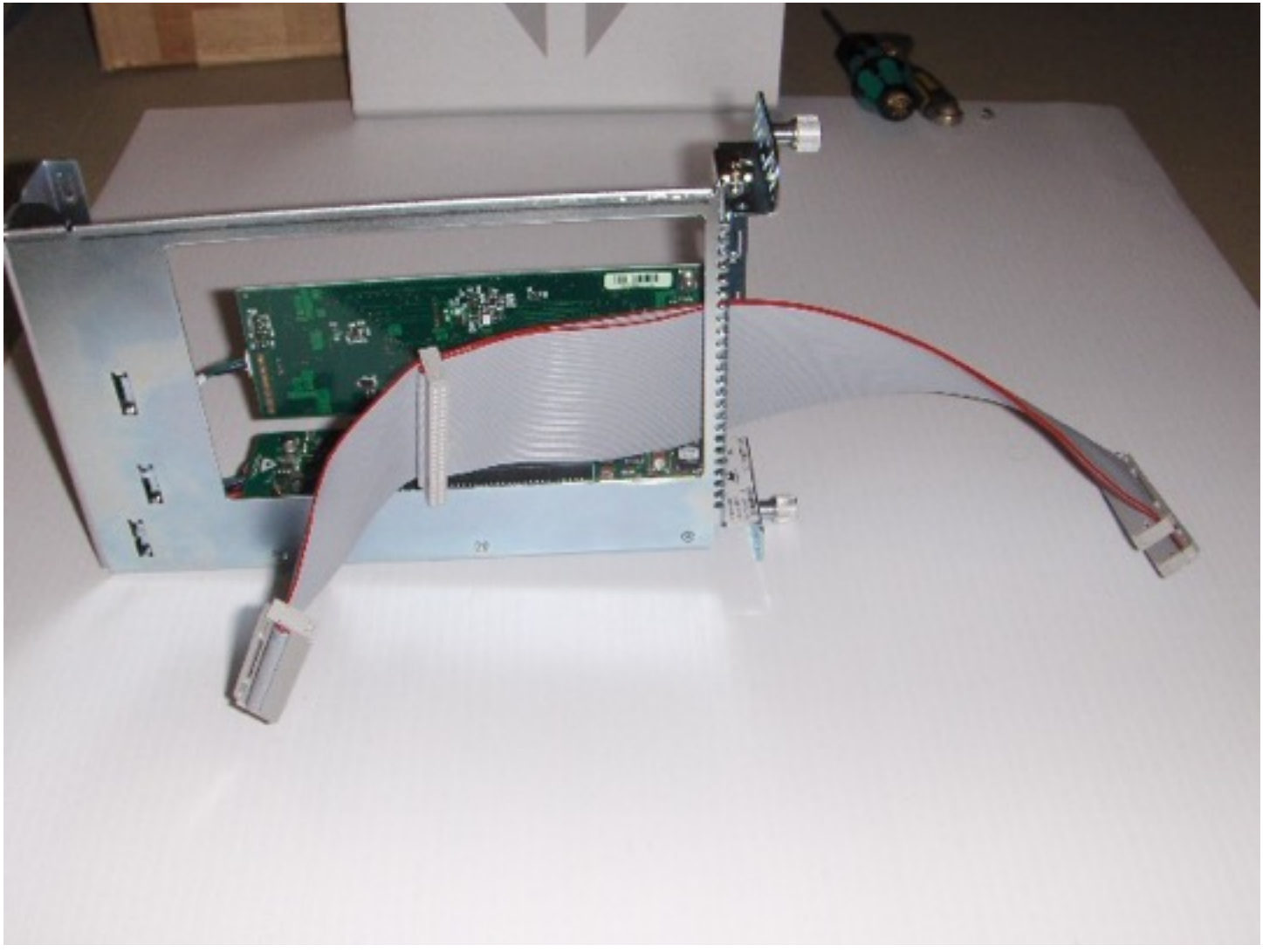
Turn Fan Control to OFF

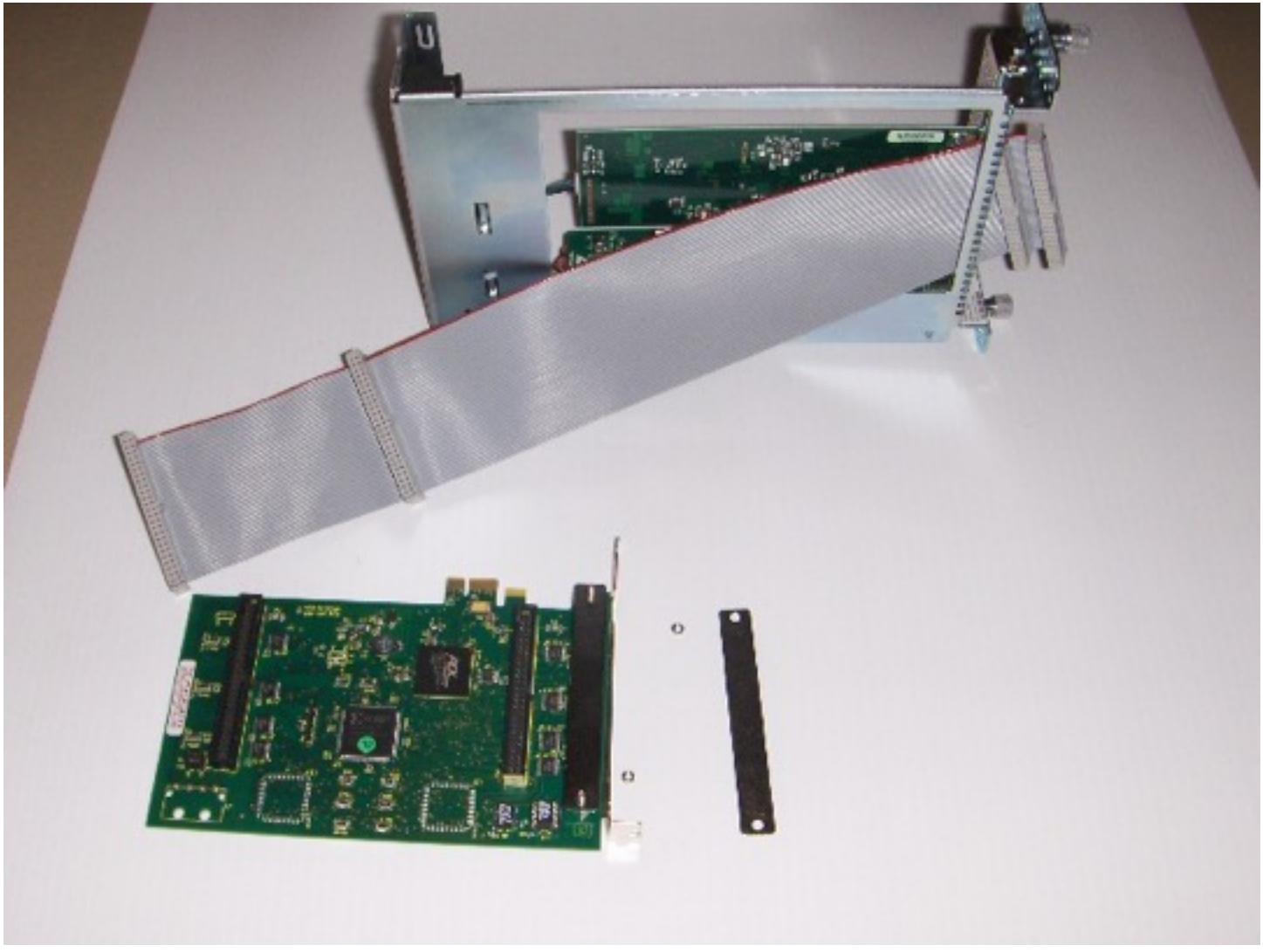
The fan control is on the bottom.

Feed the flat cable assembly through the Thunderbolt-1

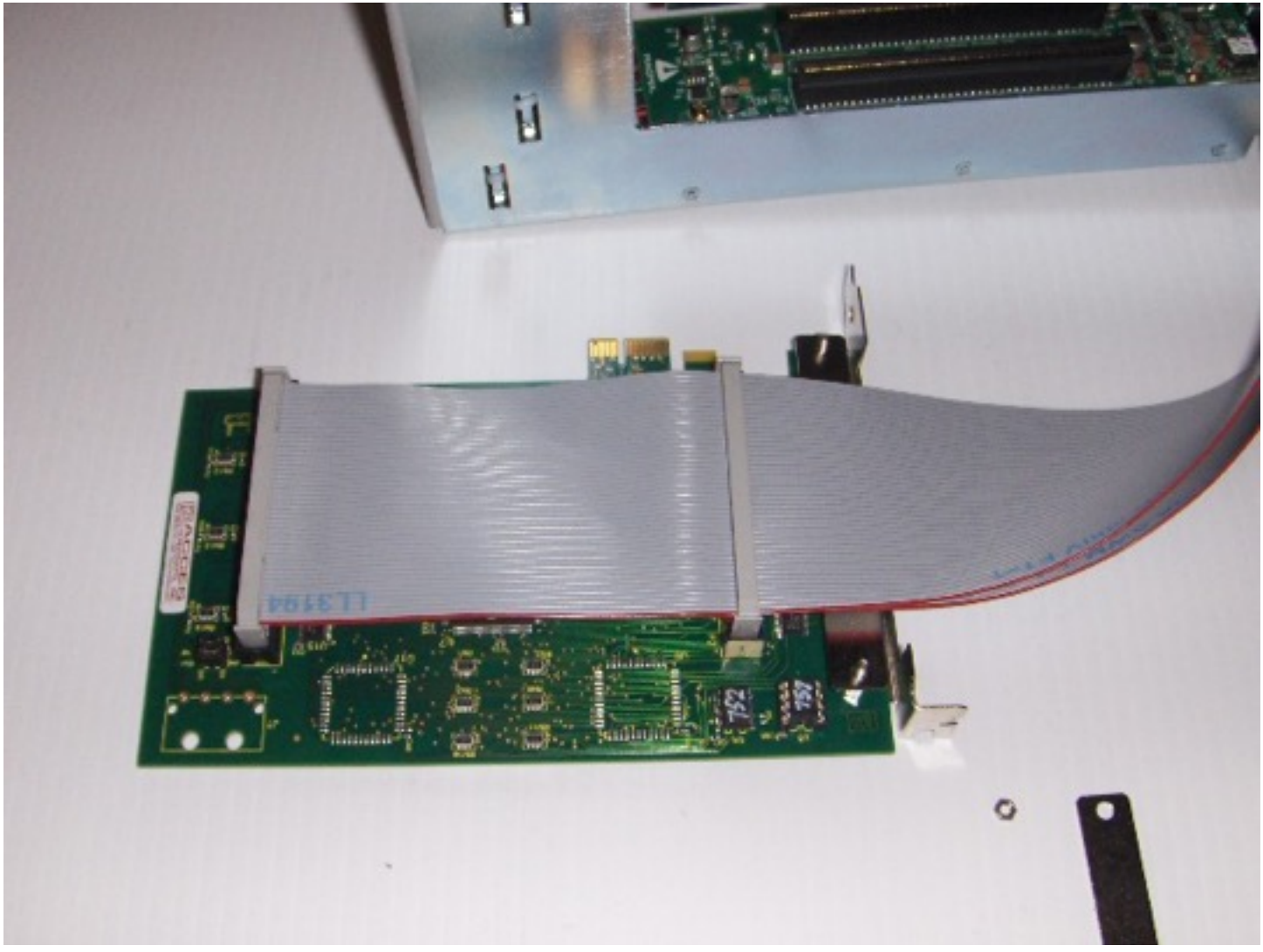


Fat cable assembly.

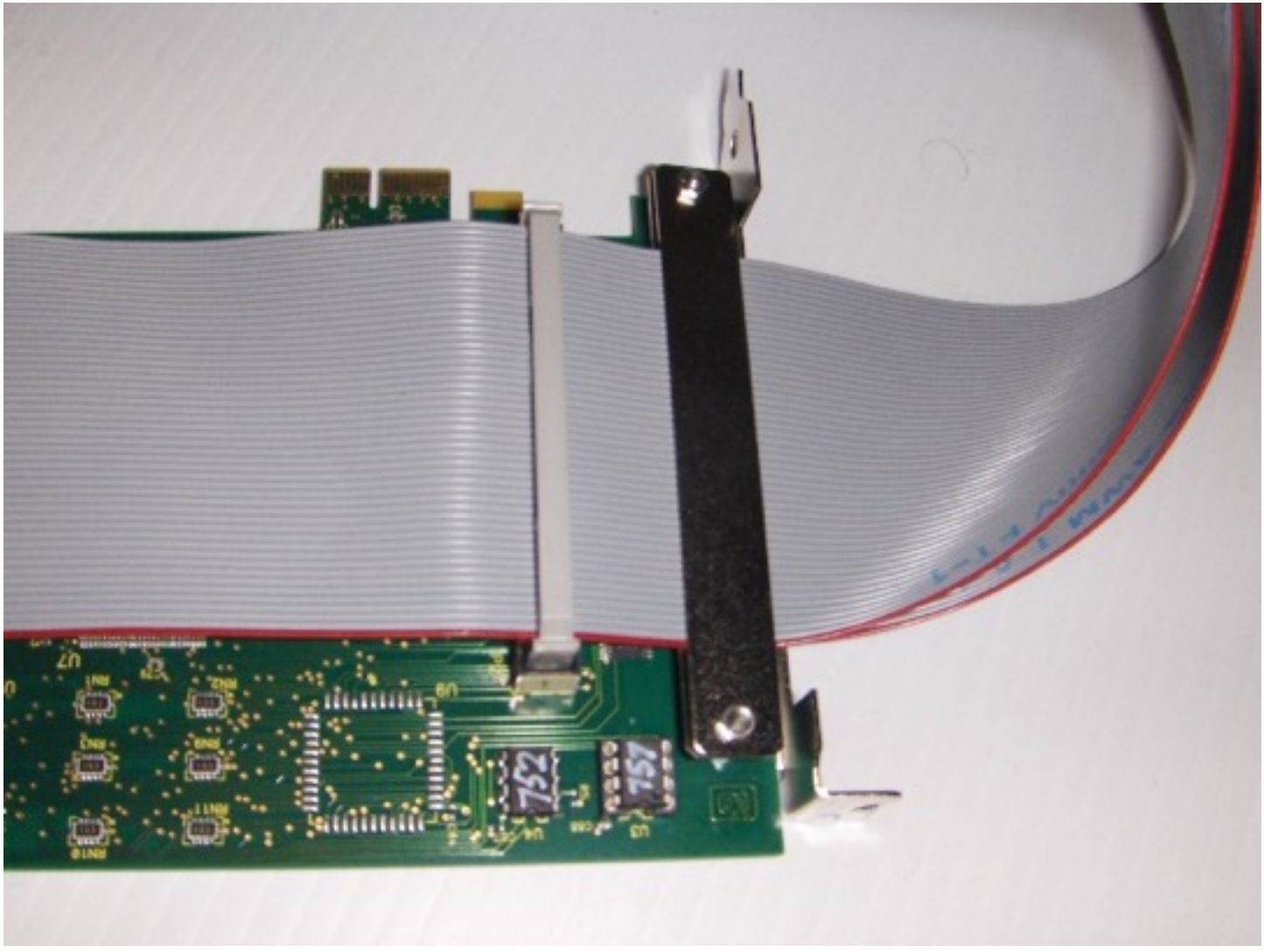




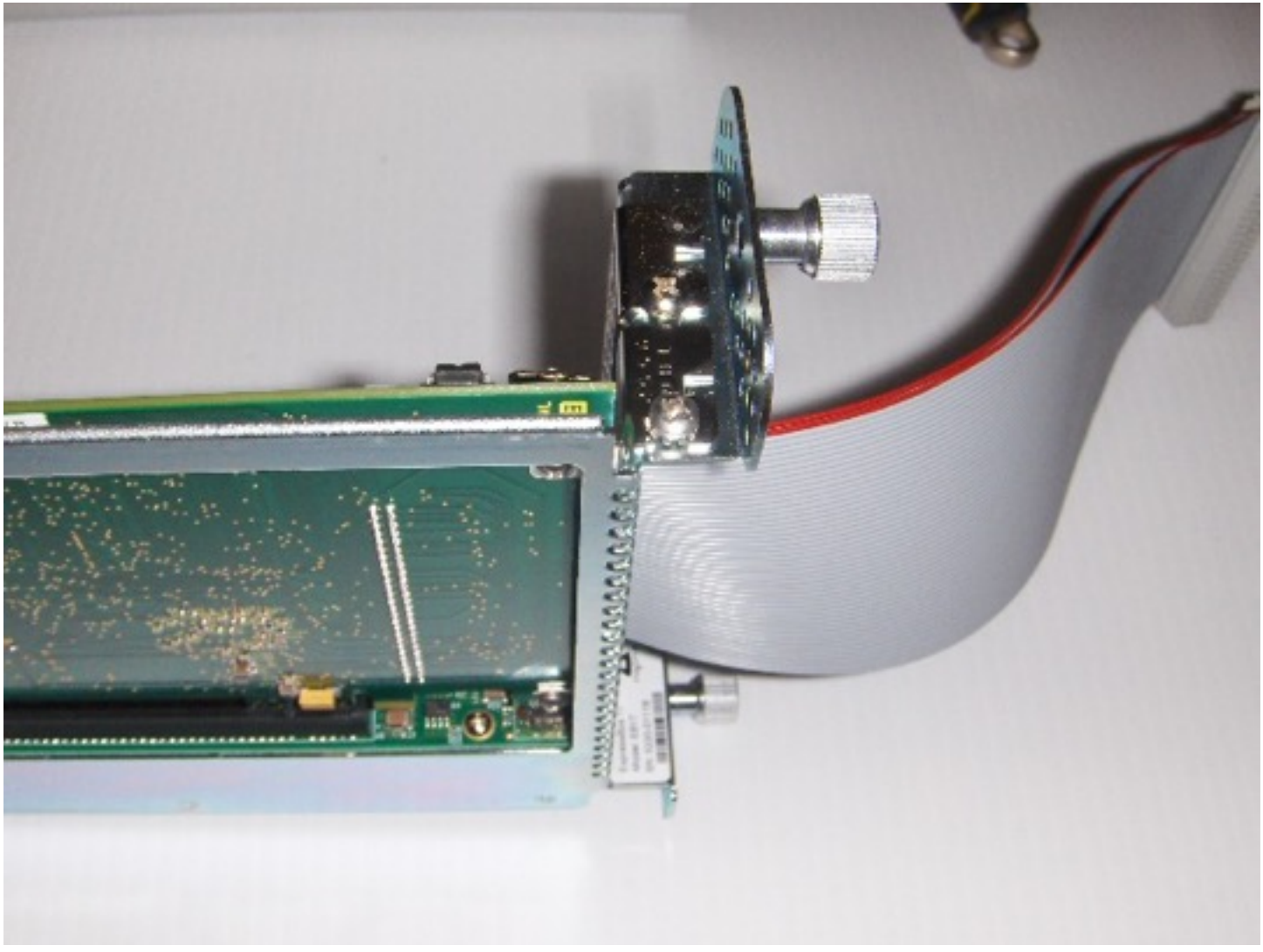
Disassemble the cable strain relief on the digital I/O card.



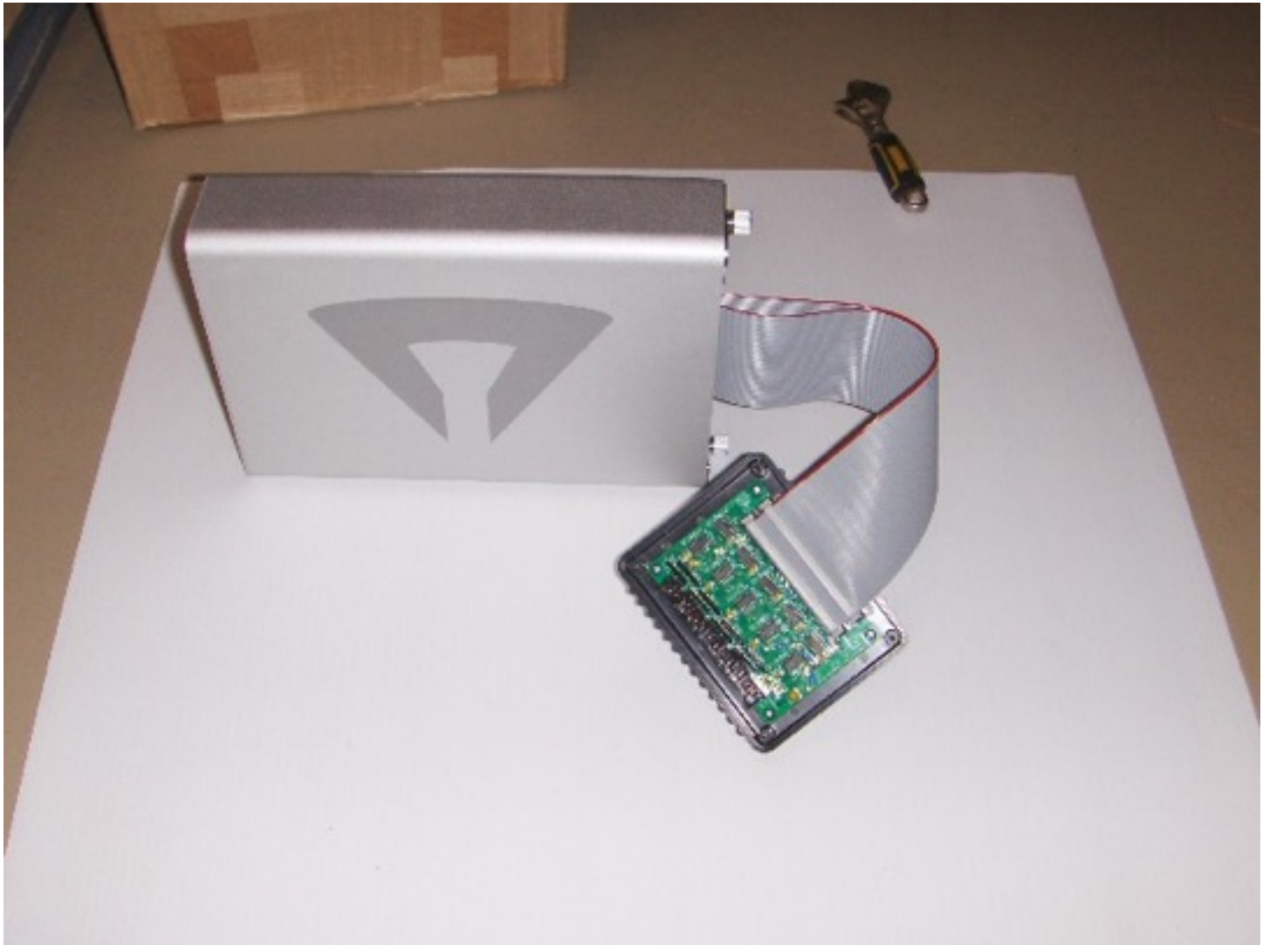
Connect the flat cable assembly to the digital I/O card.



Secure the cable strain relief.



Seat and secure the digital I/O card in the Thunderbolt-1 chassis.



Complete Thunderbolt-1 and BTB-1 assembly.

Connect Thunderbolt-1 to Mac - Console system.log

Install SynclavierDigitalPCI.kext. Restart required.

Console system log when Thunderbolt-1 is connected to Mac.:

```
Synclavier PCIe PCIDevice: init
Synclavier PCI Device: start (2.2.0) (thread 0xffffff801cd5f840) (size 568456)
Synclavier PCI Device: BusNumber: 196  DeviceNumber: 4 Vendor: 0x494f, Device: 0x0c61
Synclavier PCI Device: setPowerState 3
```

BTB1Test Program Output

BTB1Test Program Output when launched first time.

```
Looking for PCI/PCIe cards...
   Error: Card could not be initialized (130) Synclavier® Digital hardware Vendor
          ID 494f Device ID 0c61 detected.
New card – attempting to program BAR3
         – programed OK – power cycle required
```

Console system log when Thunderbolt-1 is disconnected to Mac.:

```
Synclavier PCI Device: terminate (1)
Synclavier PCI Device: terminate: checkLink -536870208
Synclavier PCI Device: willTerminate
Synclavier PCI Device kIOMessageServiceIsTerminated
Synclavier PCI Device: didTerminate
Synclavier PCI Device kIOMessageServiceIsRequestingClose
Synclavier PCI Device: stop (0)
Synclavier PCI Device: free
```

Console system log when Thunderbolt-1 is reconnected to Mac.:

```
Synclavier PCIe PCIDevice: init
Synclavier PCI Device: start (2.2.0) (thread 0xffffff801cd5f840) (size 568456)
Synclavier PCI Device: BusNumber: 196  DeviceNumber: 4 Vendor: 0x494f, Device: 0x0c61
Synclavier PCI Device: setPowerState 3
```

PCI-1 Test Program Output when launched second time time.

```
Looking for PCI-1 cards...
Synclavier® Digital hardware Vendor ID 494f Device ID 0c61 detected.
BTB-1 revision 1 identified

OK: Board pci494f,c61 found; beginning tests...
   Testing the PCI-1 Registers on board pci494f,c61...
   Error: No poly memory available for test on board pci494f,c61
```

PCI-1 Test Program Output with tower connected.

```
Start of PCI-1 Test Program (OS X 8/1/2012)

Looking for PCI-1 cards...
Synclavier® Digital hardware Vendor ID 494f Device ID 0c61 detected.
BTB-1 revision 1 identified

OK: Board pci494f,c61 found; beginning tests...
   Testing the PCI-1 Registers on board pci494f,c61...
   OK: Looks like a poly system is available for testing board pci494f,c61
   Note: Test will run forever. Halt test with ctrl-c
   time tested:  0:00:05   megs tested:     2  poly megs/min:  23
   time tested:  0:00:10   megs tested:     5  poly megs/min:  29
   time tested:  0:00:15   megs tested:     7  poly megs/min:  27
   time tested:  0:00:20   megs tested:    10  poly megs/min:  29
   time tested:  0:00:25   megs tested:    13  poly megs/min:  31
   time tested:  0:00:30   megs tested:    15  poly megs/min:  29
   time tested:  0:00:35   megs tested:    18  poly megs/min:  30
```