

Phase 2 Cables Progress

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Today's update starts on [slide 10](#)

Ready to make cables

- Have most of the necessary tools to begin making cables
- Still need an ultrasonic cleaner
- Need to decide which metcal tips we want to use
 - We have a large selection to choose from but can't keep them all
 - Assuming we want 600 series (675⁰)

Cable Making

- Received cable and connectors from Shaun
- Started cutting cable
- Cleanliness?
 - Iso to clean surfaces and cables? Gloves while handling?
- How many spare cables should we make? Should I use all the cable we have?
- Only equipment I think we still need is chemicals
 - Was told the Plasma group handles the chemicals but not sure who to talk to
- Following Pinout found here ([Phase 2 cables](#))
 - Lists Ceramtec HV feedthru

Cable Making Plan

Signal Cables 32+10 Spare	HV Cables 32 + 8 Spare
Cut (Done)	Cut (Done)
Strip (Done)	Strip (Done)
Label with heatshrink (½ done)	Label with heatshrink
Crimp db 25 pins	Solder ground wires
Solder cirlex boards (put on heatshrink)	Clean
Clean	Solder cirlex boards
Heat heatshrink	Clean

How you can help

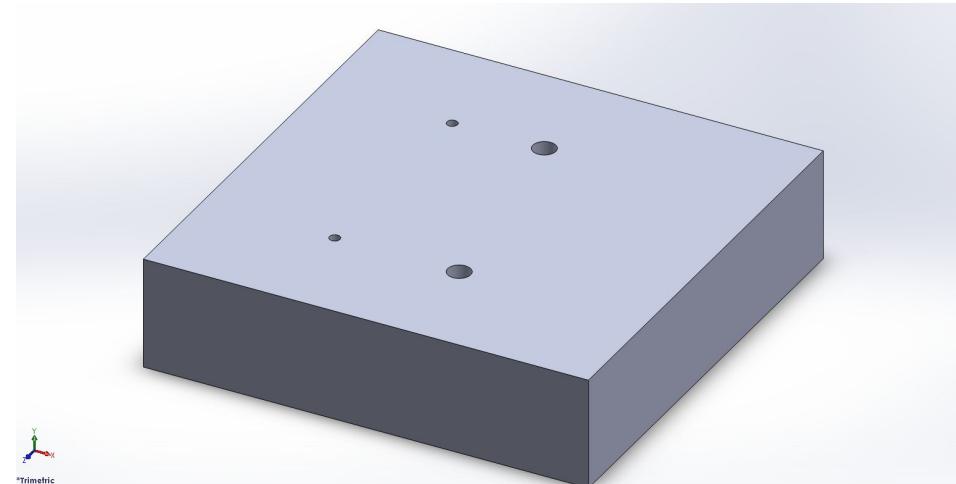
- Please respond to the whenisgood survey
 - <http://whenisgood.net/k88k7xe>
- Anytime listed I will be in the cable making room (3121 Chamberlin)
- Feel free to stop in anytime for as long as you can
- No experience required

Cirlex board pin holding jig

PSL is machining this part.

Should allow us to hold the pins in place while we solder.

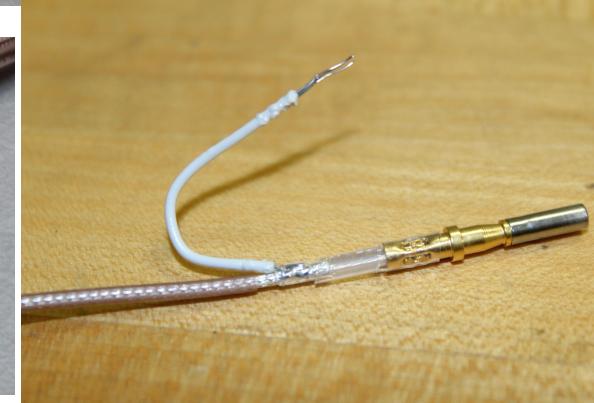
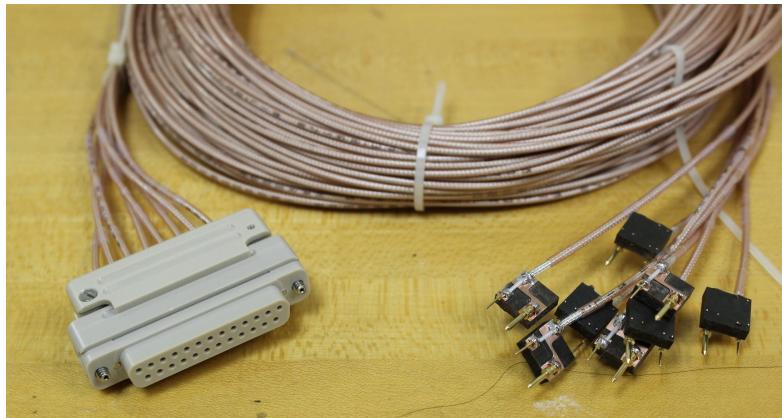
Will have the correct spacing between pins (designed to the same spec as the boards



Cable Making Plan

Signal Cables 32+10 Spare	HV Cables 32 + 8 Spare
Cut (Done)	Cut (Done)
Strip (Done)	Strip (Done)
Label with heatshrink (Done)	Label with heatshrink (Done)
Crimp db 25 pins (Done)	Solder ground wires (Done)
Solder cirlex boards (Done)	Solder cirlex boards (Done)
Clean (Done)	Clean (Done)
Heat heatshrink (Done)	Combine ground wires
Connectivity test (Done)	Connectivity Test

Progress Pictures



Notes for SLAC

- I used the wrong wire on the HV feedthrough side
 - So I did not add the wire from the central conductor to a lug
 - I will try to make it easy to attach one using the correct wire at SLAC
- There is some excess copper wire on the back of the cirlex boards
 - We don't have a file so if this needs to be done it will have to be at SLAC

Cables notes

- I took off all of the wires that were not teflon coated and replaced them with copper wire covered in heatshrink
- On 5 of the 6 HV cables have heatshrink over the bundle but one still has zip ties