

M1 M2
Cable, SMA-SMA,
Plug-Plug, 6 inch
Cinch 415-0029-006
Qty. 2

Title: **PSDT: Single-Ended to Differential Adapter**

Variant: **Standard Configuration**

Asm: **ASP0021**

Number: **SCH0021**

Rev: **v1.0.0**

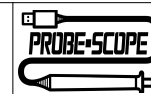
Date: **6/24/2019**

Time: **1:15:49 AM**

Sheet **1** of **1**

File: **D:\Dropbox\O-Scope Probe\Digital Test SE2D - PCB\SE2D v1.0.0.SchDoc**

Probe-Scope: Unified USB
Oscilloscope Probe
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K. Hall, released under the
CERN OHL v1.2



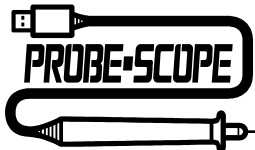
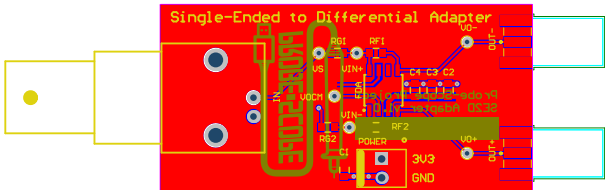
- Notes:
- 1. Base material is 0.062 thick FR4
 - 2. Foils to finish at 1oz
 - 3. All hole sizes are after plating
 - 4. Soldermask with L.P.I, Color is Green
 - 5. Soldercoat after soldermask
 - 6. Silkscreen with white epoxy
 - 7. Holes with zero diameter pads are unplated

Top Overlay

Top Layer
Bottom Layer

Bottom Overlay

Board Outline



Unified USB Oscilloscope Probe
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FILE PATH: D:\Dropbox\O-Scope Probe\Digital Test SE2D - PCB\SE2D v1.0PcbDoc

ENGINEER:
J. Rowley, M. Omo

PCB DESIGNER:
J. Rowley

DATE:
6/24/2019

SHEET SIZE:
LETTER

TITLE:
PSDT Single-Ended to
Differential Adapter

PART NO.:
ASP0021

DWG NO.:
CAD0021

REV:
v1.0

SCALE:
NONE



BILL OF MATERIALS

Probe-Scope: Unified USB Oscilloscope Probe

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| Designator | MANF | MANF_PN | Quantity | VENDOR | VENDOR_PN | P&V Description | Footprint | Comment |
|--------------------------------|--------------------------------------|------------------|----------|---------|------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------|
| C1 | Samsung Electro-Mechanics | CL10A106MA8NRNC | 1 | Digikey | 1276-1869-1-ND | Capacitor, Ceramic, 10uF, 25V, 20% Tol, 85C, X5R, 0603, SMD | 0603(1608) | 25V |
| C2 | Taiyo Yuden | TMK107BJ105KA-T | 1 | Digikey | 587-1248-1-ND | Capacitor, Ceramic, 1uF, 25V, 10% Tol, 125C, X5R, 0603, SMD | 0603(1608) | 25V |
| C3 | Samsung Electro-Mechanics | CL10B104KB8SFNC | 1 | Digikey | 1276-1936-1-ND | Capacitor, Ceramic, 0.1uF, 50V, 10% Tol, 125C, X7R, 0603, SMD | 0603(1608) | 50V |
| C4 | Samsung Electro-Mechanics | CL10B103KB8NCNC | 1 | Digikey | 1276-1921-1-ND | Capacitor, Ceramic, 0.01uF, 50V, 10% Tol, 125C, X7R, 0603, SMD | 0603(1608) | 50V |
| FDA | Texas Instruments | THS4521IDR | 1 | Digikey | 296-39226-1-ND | | TI_D0008A | THS4521 |
| IN | Tyco | 1-1337543-0 | 1 | Digikey | A97553-ND | Connector, BNC, 1 Positions, Female, Right Angle, Plastic, 50 Ohm Termination, PCB | BNC - Right Angle | R/A |
| M1, M2 | Cinch Connectivity Solutions Johnson | 415-0029-006 | 2 | Digikey | J3706-ND | | | Qty. 2 |
| OUT+, OUT- | Samtec Inc. | SMA-J-P-H-ST-EM1 | 2 | Digikey | SAM8857-ND | | *SMA-J-P-H-ST-EM1_SMA-J-P-H-ST-EM1(Primary) | SMA-J-P-H-ST-EM1 |
| POWER | Molex | 22-11-2022 | 1 | Digikey | WM2700-ND | Connector, Header, 0.1", 2 Positions, Male, 0.1" Spacing, 4A, 250V, 0.24" Long, 0.125" Tail, 15u Select Gold, Polarized, Locking Ramp | 0.1HDR1X 2P | |
| RF1, RF2, RG1, RG2 | Yageo | RC0603FR-071KL | 4 | Digikey | 311-1.00KHRCT-ND | Resistor, Thick Film, 1.00k Ohms, 0.1W, 1% Tol, 75V, 0603, SMD | 0603(1608) | Res1 |
| VIN+, VIN-, VO+, VO-, VOCM, VS | Keystone Electronics | 1998-3 | 6 | Digikey | 1998-3K-ND | Connector, Test Point, 1 Positions, Male, Small, 0.27" Straight Pin, 0.02" dia | TESTPOIN T024 | TP |