

Title: **Probe-Scope Analog Frontend Test**

Variant: **Standard Configuration**

Asm: **ASP0010**

Number: **SCH0010**

Rev: **v1.0.0**

Date: 6/20/2019 Time: 7:00:29 PM Sheet 1 of 1

File: D:\Dropbox\O-Scope Probe\RF Frontend Test - PCB\RF Frontend v1.0.0.SchDoc

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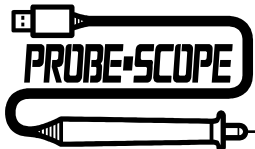
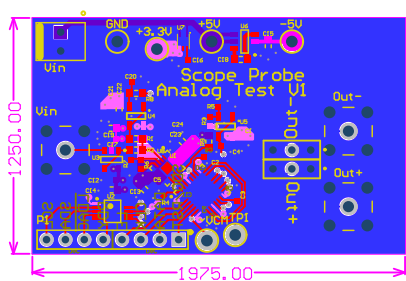
- Notes:
- 1. Base material is 0.062 thick FR4
 - 2. Foils to finish at 1oz
 - 3. All hole sizes are after plating
 - 4. Soldermask with L.P.I, Color is Green
 - 5. Soldercoat after soldermask
 - 6. Silkscreen with white epoxy
 - 7. Holes with zero diameter pads are unplated

Top Overlay

Top Layer
Signal Layer 1
Signal Layer 2
Bottom Layer

Bottom Overlay

Board Outline



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FILE PATH: D:\Dropbox\O-Scope Probe\VF Frontend Test - PCB\VF Frontend v1.0.PcbDoc

ENGINEER: M. Omo	TITLE: Probe—Scope Analog Frontend Test	
PCB DESIGNER: M. Omo		
DATE: 6/20/2019	PART NO.: ASP0010	REV: v1.0
SHEET SIZE: LETTER	DWG NO.: CAD0010	SCALE: NONE



BILL OF MATERIALS

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Designator	MANF	MANF_PN	Quantity	VENDOR	VENDOR_PN	P&V Description	Footprint	Comment
+3.3V, +5V, -5V, GND, TP1, VCM	Keystone Electronics	5005	6	Digikey	5005K-ND	Connector, Test Point, Red, Loop, Thru Hole, 0.22", 0.063" Dia	TESTPOIN T062	TP
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C16, C17, C20, C21, C23	Samsung Electro-Mechanics	CL05F104ZO5NNNC	17	Digikey	1276-1004-1-ND	Capacitor, Ceramic, 0.1uF, 16V, 20% Tol, 85C, 0402, SMD	0402(1005)	Cap
C13, C14, C15, C18, C19, C22, C24	Samsung Electro-Mechanics	CL10A106MA8NRNC	7	Digikey	1276-1869-1-ND	Capacitor, Ceramic, 10uF, 25V, 20% Tol, 85C, X5R, 0603, SMD	0603(1608)	25V
Out+, Out-	Harwin	M20-9990346	2	Digikey	952-2264-ND	Connector, Header, 0.1", 3 Positions, Male, 0.1" Spacing, Vertical, Tin Plated	0.1HDR1X3	0.1"
Out+, Out-, Vin	TE Connectivity	5-1814832-1	3	Digikey	A97594-ND	Connector, SMA, 1 Positions, Female, Vertical. 50 Ohm. 3 GHz.	TE SMA Stright	SMA
P1	Molex	22-28-4083	1	Digikey	WM6508-ND	Connector, Header, 0.1", 8 Positions, 0.1" Spacing, 4A, 250V, 0.24" Long, 0.125" Tail, 15u" Select Gold	0.1HDR1X8	0.1" Vert
R1, R2	Yageo	RC0603FR-0710KL	2	Digikey	311-10.0KHRCT-ND	Resistor, Thick Film, 10.0k Ohms, 0.1W, 1% Tol, 50V, 0603, SMD	0603(1608)	Res1
R3, R5, R6, R7	Stackpole Electronics	RMCF0402FT10K0	4	Digikey	RMCF0402FT10K0CT-ND	Resistor, Thick Film, 10k Ohms, 0.063W, 1% Tol, 0402, SMD	0402(1005)	Res1
R4	Stackpole Electronics	RMCF0402ZT0R00	1	Digikey	RMCF0402ZT0R00CT-ND	Resistor, Thick Film, 0 Ohms, 0402, SMD	0402(1005)	Res1
R8	Panasonic	ERJ-3EKF1692V	1	Digikey	P16.9KHCT-ND	Resistor, Thick Film, 16.9k Ohms, 0.1W, 1% Tol, 0603, SMD	0603(1608)	Res1
R9	Rohm	MCR03ERTJ000	1	Digikey	RHM0.0CGCT-ND	Resistor, Thick Film, 0.0 Ohms, 0.1W, 75V, 20m Ohm Max, 0603, SMD	0603(1608)	Res1
U1	Analog Devices	ADRF6518ACPZ-R7	1	Digikey	ADRF6518ACPZ-R7CT-ND	IC, VGA, VGA, 0Hz ~ 1.1GHz, QFN-32, SMD	QFN50P50 0X500X80_ HS-33L	ADRF6518
U2	Microchip	MCP4728T-E/UN	1	Digikey	MCP4728T-E/UNCT-ND	IC, DAC, 12 Bit, 4 Channel, MSOP-10, SMD	MSOP-10	MCP4728
U3	Analog Devices	AD8055ARTZ-REEL7	1	Digikey	AD8055ARTZ-REEL7CT-ND	IC, Op Amp, 300MHz, 1400V/μs, SOT-23-5, SMD	SOT95P28 0X145-5L	AD8055
U4, U5	Texas Instruments	OPA365AIDBVR	2	Digikey	296-20645-1-ND	IC, Op Amp, IC OPAMP GP R-R 50MHZ SOT23-5, SOT-23-5, SMD	SOT23-5	OPA365
U6	Texas Instruments	LM2664M6X/NOPB	1	Digikey	LM2664M6X/NOPBCT-ND	IC, Voltage Regulator, Charge Pump, Inverting, SOT-23-5, SMD	SOT95P28 0X145-6N	LM2664
U7	Microchip	MIC5353-3.3YMT-TR	1	Digikey	576-3680-1-ND	IC, Voltage Regulator, ULDO, Low Noise, 500mA, 2.6-6Vin,, DFN-6, SMD	MLF22D-06	MIC5353
U8	Analog Devices	ADA4932-1YCPZ-R7	1	Digikey	ADA4932-1YCPZ-R7CT-ND	IC, Op Amp, Differential Amplifier, 3-11V, 2800V/μs, 560MHz, QFN-16, SMD	QFN50P30 0X300X80_ HS-17L	ADA4932-1
Vin	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	0.1HDR1X2P	0.1"