

parts list

Phase Shifter- [PE44820](#)

Combiner- <https://www.minicircuits.com/WebStore/dashboard.html?model=BP4P1%2B>

LNA- <https://www.digikey.com/en/products/detail/qorvo/SGL0622Z/24611169>

20db coupler -

<https://www.digikey.com/en/products/detail/ttm-technologies-inc/DC1722J5010AHF/3069208>

Power detector: (Look for active power detector) AD8318 check resolution qualifications

[AD8318 \(Rev.E\)](#)

Intercept		19.5	22	24	dBm
Output Voltage—High Power In	$P_{IN} = -10 \text{ dBm}$	0.7	0.78	0.86	V
Output Voltage—Low Power In	$P_{IN} = -40 \text{ dBm}$	1.42	1.52	1.62	V
Temperature Sensitivity	$P_{IN} = -10 \text{ dBm}$				
	$25^{\circ}\text{C} \leq T_A \leq 85^{\circ}\text{C}$		0.0011		dB/°C



Patch Antenna- [DSGP.1575.18.2.A.02 Taoglas Limited | RF and Wireless | DigiKey](#)

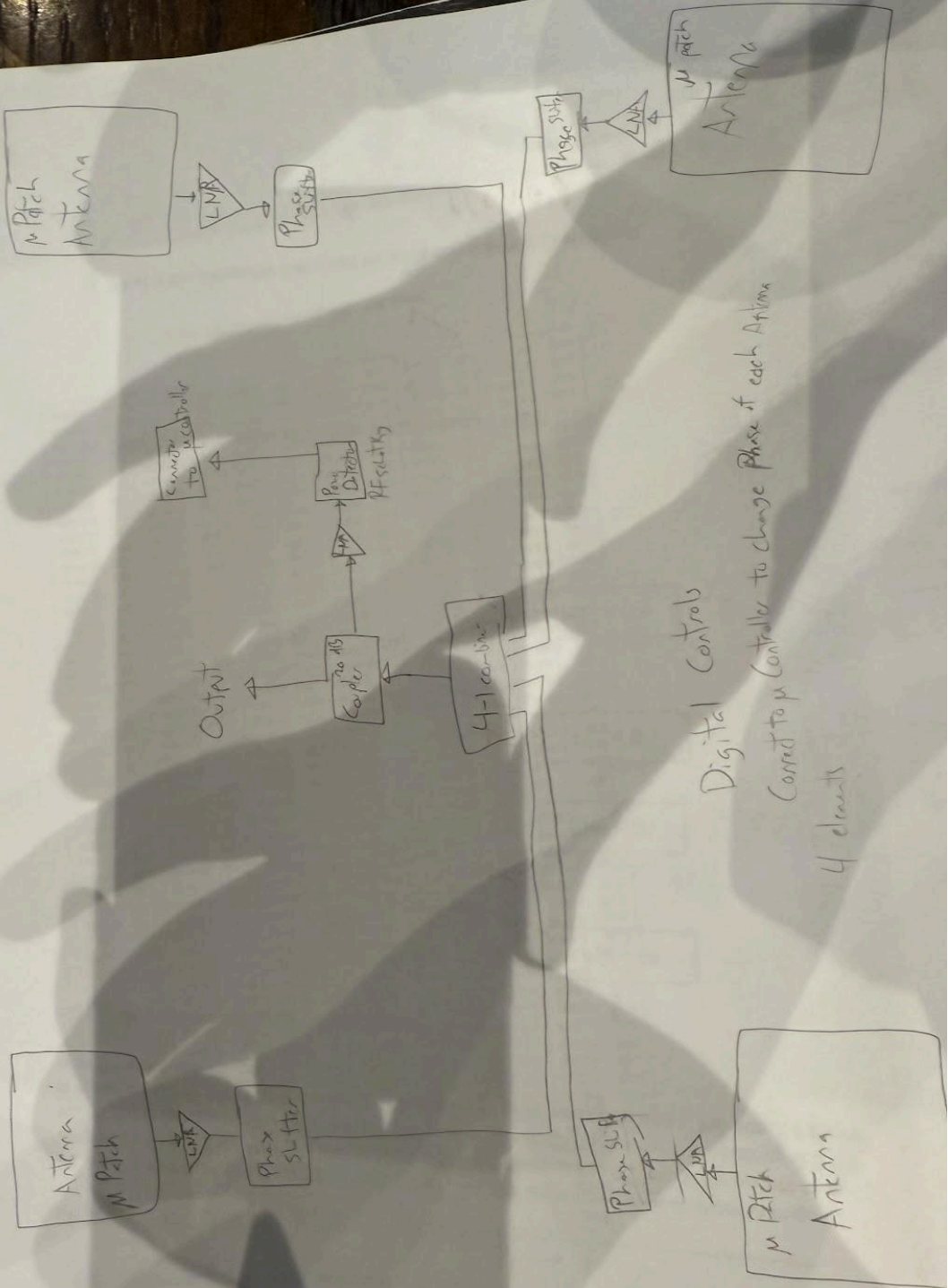
10 pin connector: [3221-10-0300-00 CNC Tech | Connectors, Interconnects | DigiKey](#)

Cap: 0603

Inductor: 0603

GPS receiver intermediate: [746 Adafruit Industries LLC | Development Boards, Kits, Programmers | DigiKey](#)

RF filter: [DPX162500DT-8014A1 TDK Corporation | RF and Wireless | DigiKey](#)



Digital Controls
 Connect to μ Controller to change Phase of each Antenna
 4 elements