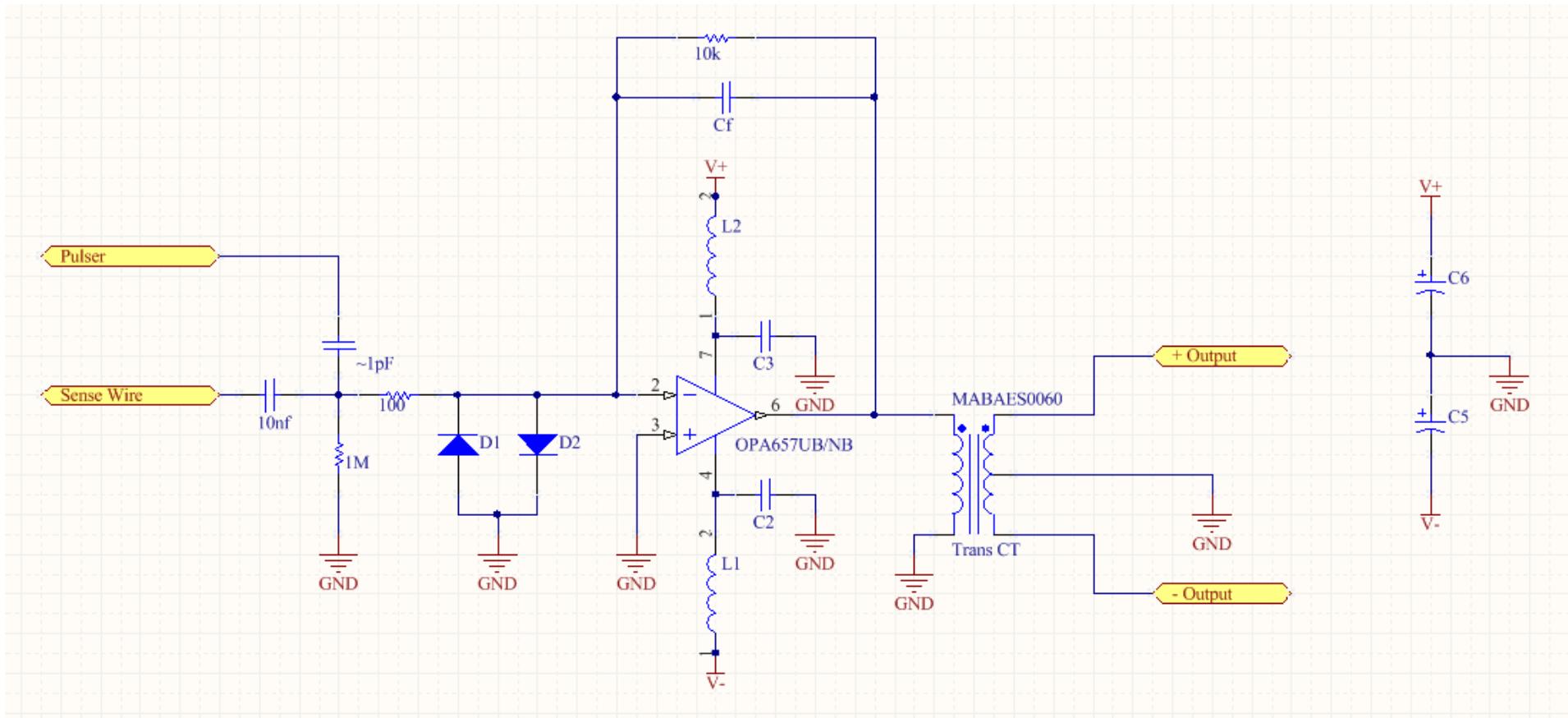


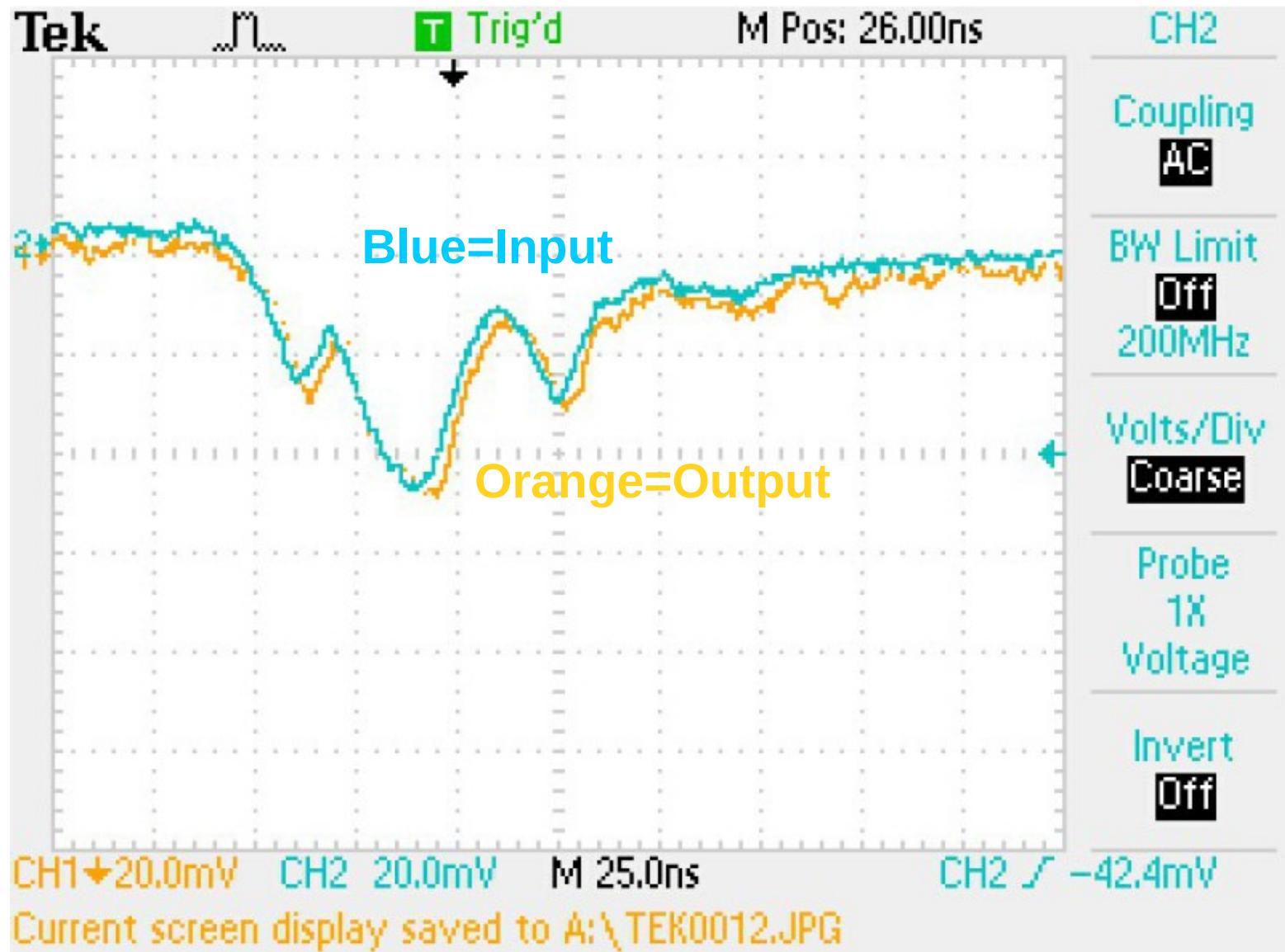
# Final updates on MWPC Preamplifier Electronics

Week of May 29

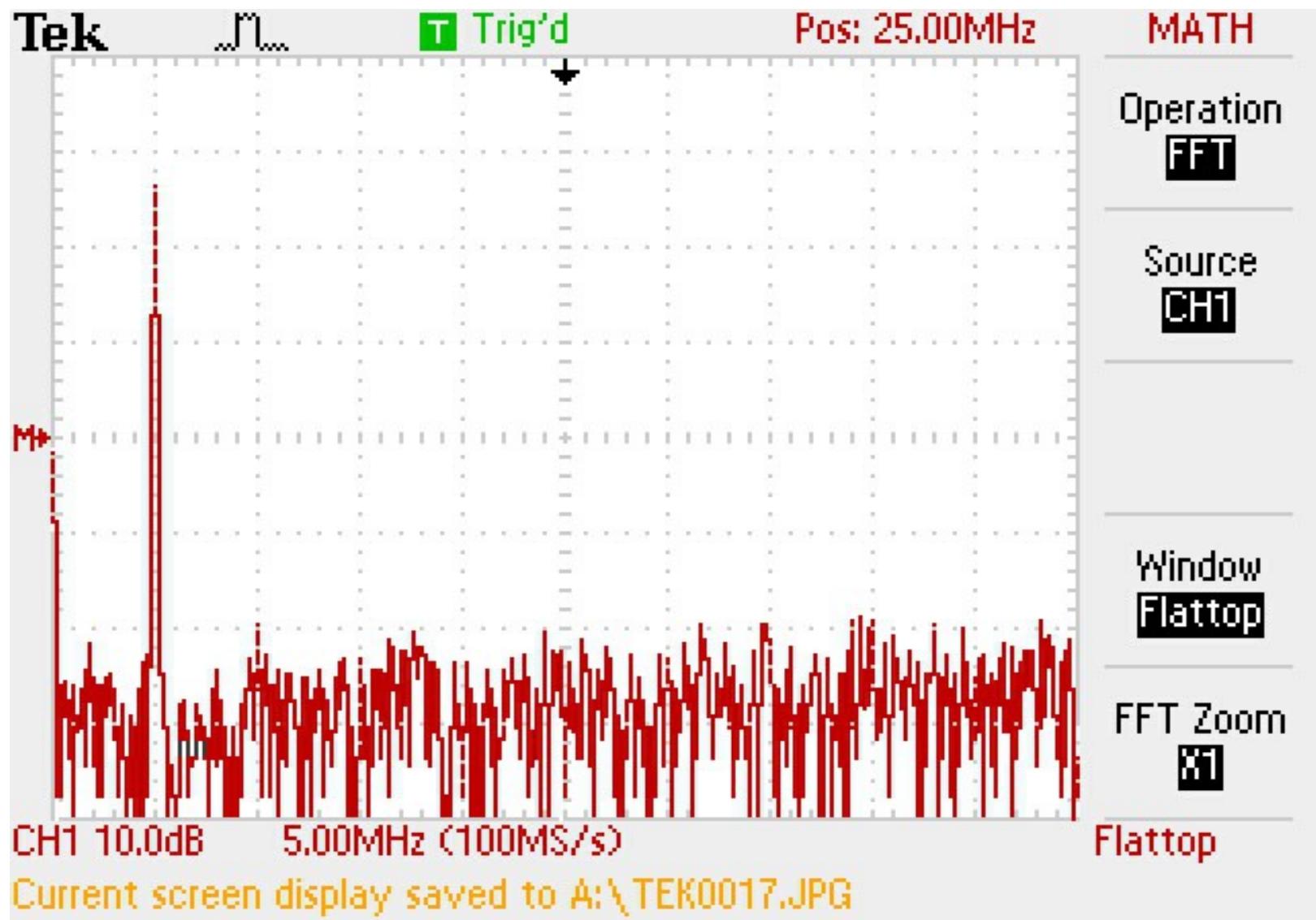
# Final Implemented Schematic



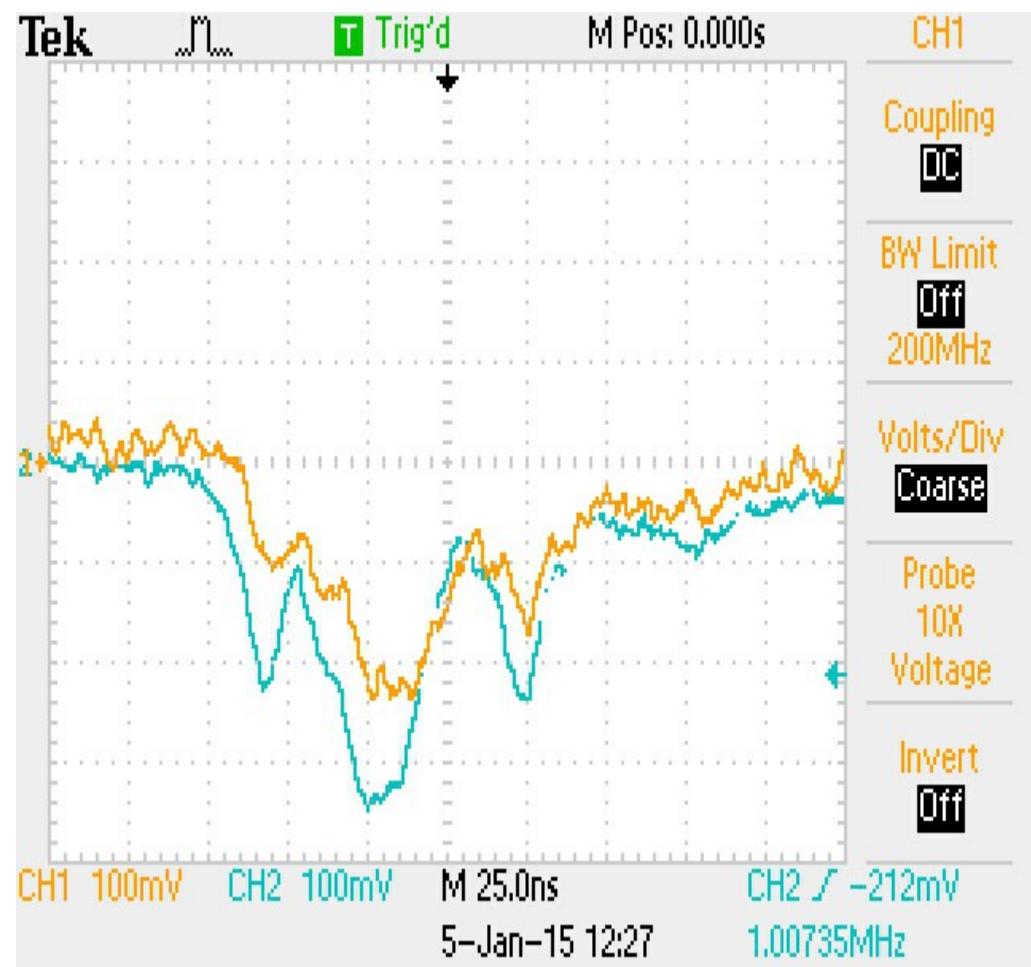
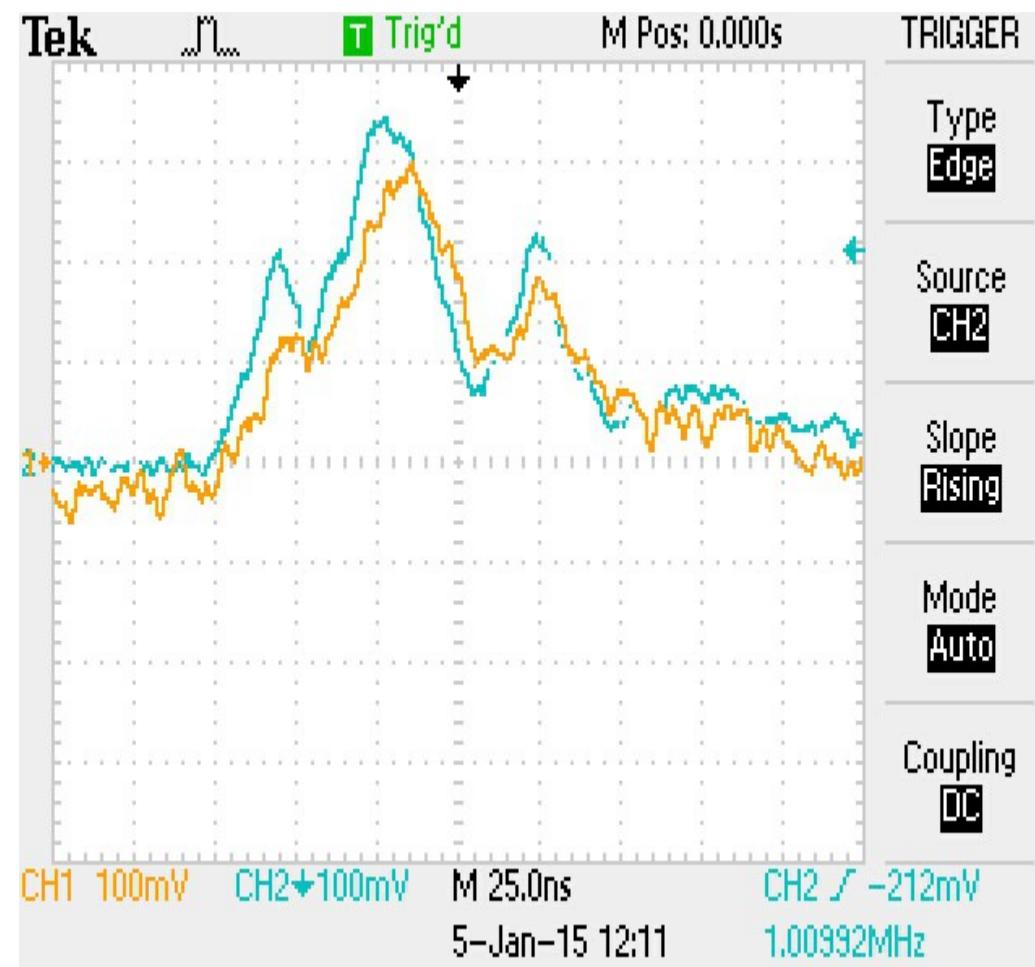
# Amplifier Performance



# Amplifier Noise FFT



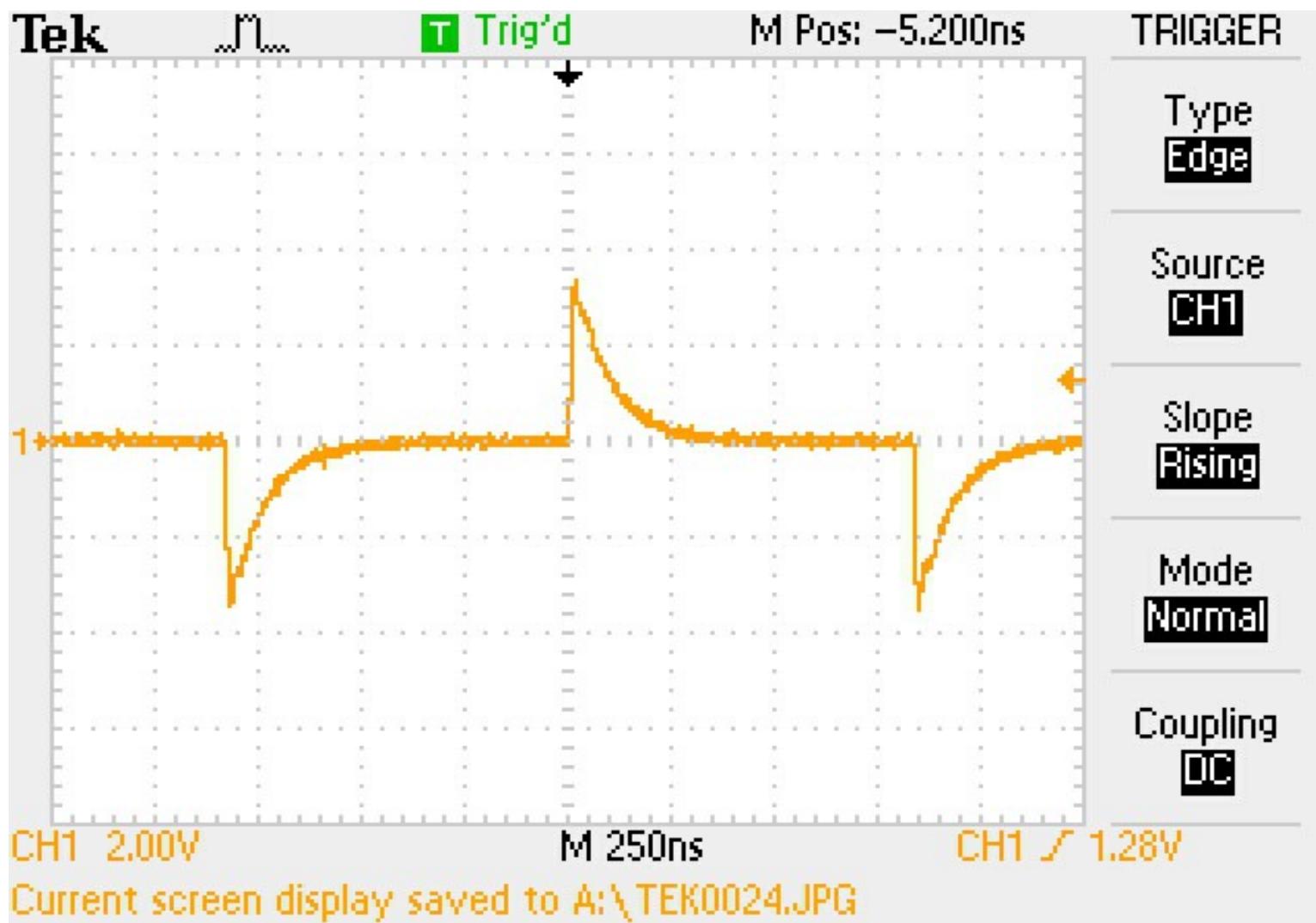
# Transformer Performance



MABAES0060

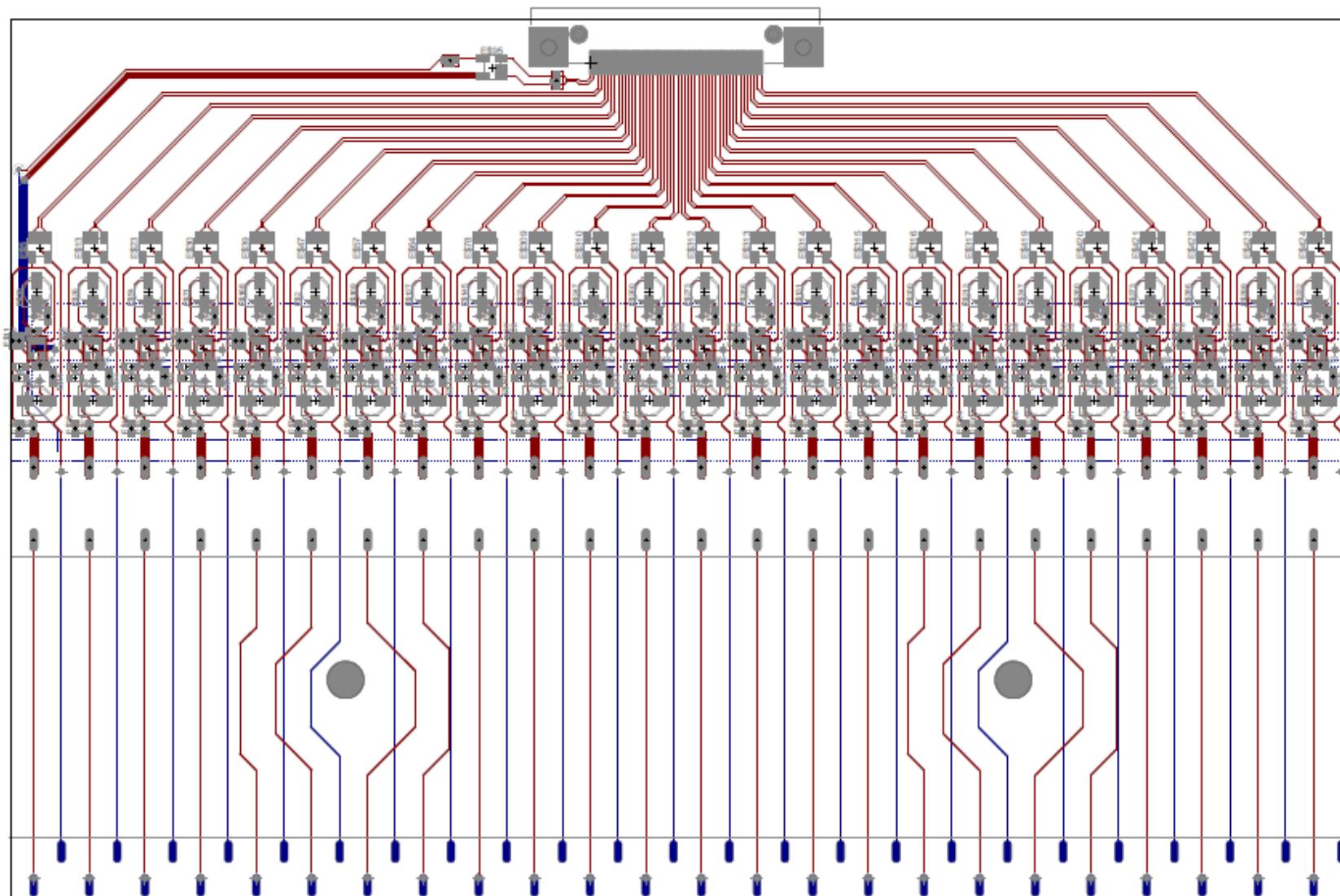
ADT1-1WR+

# Pulser Circuit



Driven with 5 Volt Square wave

# 24-Channel PCB Design



# Rough Bill of Materials

Part	Supplier	Price per unit	Units per channel	Cost per channel	Notes	Total Line Cost
IC OPAMP VFB 1.6GHZ	Digikey #OPA657NB/250TR-	7.53875	1	7.53875	Total of 1750	13192.8125
MABAES0060	Digikey #1465-1317-2-ND	1.1692	1	1.1692	Total of 2000	2338.4
CAP CER 10000PF 3KV	Digikey #478-5965-2-ND	0.576	1	0.576	Total of 2000	1152
RES 1M OHM 1W	Digikey #A102508CT-ND	0.04944	1	0.04944	Total of 2000	98.88
CAP ALUM 47 UF 16 V	Digikey #565-2088-1-ND	0.0756	2	0.1512	Total of 4000	302.4
DIODE SML SIG 75V 0.15A	Digikey #1N4148WSFSCT-N	0.01955	2	0.0391	Total of 6000	117.3
FERRITE BEAD 1000 OHM	Digikey #587-1867-1-ND	0.0172	2	0.0344	Total of 4000	137.6
CAP CER 0.1UF 16V	Digikey #490-1532-1-ND	0.00468	2	0.00936	Total of 4000	18.72
RES SMD 10K OHM 1% 1/8W	Digikey #MCT0603-10.0K-CF	0.024	1	0.024	Total of 2000	48
CAP CER 1PF 50V	Digikey #1276-1293-1-ND	0.0105	1	0.0105	Total of 2000	21
RES SMD 1M OHM 1% 1/8W	Digikey #MCT0603-1.00M-CI	0.024	1	0.024	Total of 2000	48
RES SMD 100 OHM 1% 1/8W	Digikey #MCT0603-100-CFC	0.024	1	0.024	Total of 2000	48
CONN MDR RECEPT 50POS R/A SMD	Digikey #3M1826-ND	9.756	0.04166666667	0.4065	Total of 66	643.896
			Total Parts Cost per Channel	10.05645	Total Parts Cost	18167.0085