							Vendor part	
Part	Vendor	Cost per unit	# per scanner	Quantity	Description	Website	number	Order history, comments
GPA parts								
OPA549	Texas Instruments	21.6	3		Power op amp (10 A)		OPA549S-ND	
VF-S320-15A-CFS	CUI Inc	136.59			Power supply 15V, 23A, closed frame, fan		102-2004-ND	Ordered two more on 12/3 for second prototype
VI -0020-10A-01 0	COLLIC	130.50	,		0.10hm resistor 50W(sink)/3W(no sink), non-		102-2004-110	Ordered two more on 12/3 for second prototype
TR50JBXR100	Stackpole	3.64	1		inductive			
THOODEXITION	Ctackpoic	0.0			Schottky Rectifier Diode 35V reverse 9A			
90SQ035	Vishay	1.85	5		average (DO-204AR radial)		90SQ035-ND	
VF-S320-48A	CUI Inc	117.98			Power supply 48V, 7.6A, switching, open frame		0000000112	
LCM600Q-T	Emerson	211.63			Power supply 24V, 27A, switching, closed frame		454-1531-ND	
PCB COPPER CLAD 12X12" 1 SIDE	Digikey	33.26			2 oz. copper boards (12"x12")		PC11-T-ND	
PWR SUP 350W 24-48VOUT CVRENDFAN	Astec via Digikey	388.82			LPS350 power supply fan-cooled (350 W)		454-1230-ND	
PWR SUP 350W 24-46VOUT CVRENDFAN	Astec via Digikey	300.02	2		Connector kit for use with the LPS350 power		454-1230-ND	
KIT CONNECTOR MATING LPX350	Astec via Digikey	11.26	2				454-1242-ND	
	Astec via Digikey	11.20)		supply		404-1242-ND	
OPA2228								
	Digikey	1.34			Hall effect IC Sensor		620-1021-1-ND	
SENSOR CURRENT 25A BI 16SOIC	Digikey	3.74	1		25 Amp hall-effect current sensor		620-1334-1-ND	
							TGHGCR1000FE-	
RES .10HM 1% 100W CURRENT SENSE	Digikey	39.59			0.1 ohm, 100 W current sensor resistor		ND	
IC AMP CURRENT SENSE PREC 8MSOP	Digikey	2.11	1		IC current sensor		LT6105CMS8#PBI	
IC AMP CURRENT SENSE 4UCSP	Digikey	1.83	3		IC current sensor		MAX9634HERS+T	(
							TGHGCR0500FE-	
RES .05OHM 1% 100W CURRENT SENSE	Digikey	39.59	9		0.05 ohm, 100 W current sensor resistor		ND	
GPA parts final (large order)								
INA217	TI via Digikey	6.99	9	72	Instrumentation amp for analogue input		296-13645-1-ND	
	TE conn vis				,			
5555165-1	Digikey	0.93	3	75	RJ12 jack, plastic		A31422-ND	
OPA2228	TI via Digikey	5.85			Operational amplifier, dual		OPA2228UA-ND	
INA105	TI via Digikey	8.66			Instrumentation amplifier for current sensor		INA105KU-ND	
THS4131CD		7.43					296-26681-5-ND	
	TI via Digikey				Differential amplifier for scope output			
UA78L05ACDR	TI via Digikey	0.28			5V regulator 100mA		296-1364-1-ND	
MC79L12ACD	TI via Digikey	0.46			-12V regulator 100mA		296-9604-5-ND	
UA78L12ACDR	TI via Digikey	0.3	3	75	12V regulator 100mA		296-15054-1-ND	
	l						LT1027ECS8-	
LT1027ECS8	LT via Digikey	4.65		75	5V reference		5#PBF-ND	
534-11503	Vishay via Digikey	20.01			Potentiometer 50k, 10 turn		SP534-50K-ND	
OPA549	Digikey	15	5	150	high current op amp		OPA549T-ND	
399-3677-1-ND	digikey	0.38	3	250	CAP TANT 0.1UF 35V 20% 1206			
Small parts for GPAs								
P0.0ACT-ND	Digikey		24		0-ohm resistor 0805			
P402CCT-ND	Digikey		12		RES 402 OHM 1/8W 1% 0805 SMD			
P4.02KCCT-ND	Digikey		12		RES 4.02K OHM 1/8W 1% 0805 SMD			
P1.0KACT-ND			24		RES 1.0K OHM 1/8W 5% 0805 SMD			
	Digikey							
P10KACT-ND	Digikey		24		RES 10K OHM 1/8W 5% 0805 SMD			
P2.0MACT-ND	Digikey		6		RES 2.0M OHM 1/8W 5% 0805 SMD			
RG20P49.9KBCT-ND	Digikey		3		RES 49.9K OHM 1/8W .1% 0805 SMD			
445-1358-1-ND	Digikey		18		CAP CER 1UF 16V 10% X7R 0805			
445-1349-1-ND	Digikey		18		CAP CER 0.1UF 50V 10% X7R 0805			
399-1155-1-ND	Digikey		3		CAP CER 4700PF 50V 10% X7R 0805			
					CAP CER 220PF 50V 10% X7R 0805 (load			
					inductance compensation in current feedback			
311-1123-1-ND	Digikey		3		loop)			
399-5152-1-ND	Digikey		12		CAP TANT 10UF 20V 20% 1206			
399-9453-1-ND	Digikey		9		CAP TANT 0.33UF 25V 10% 1206			
399-3677-1-ND	Digikey		9		CAP TANT 0.1UF 35V 20% 1206			
			1					
511-1292-1-ND			9		LED 630NM RED WTR CLR 0805 SMD			
BR3FBR100-ND			3		RES CURRENT SENSE .1 OHM 3W 1%			
DIGI DICTOU-ND					TALE CONTREINT CLINE .T OF INTENT JVV 1/0			
Connectors for GPAs								
A31422-ND	Digiles		+		CONNIMOD IACK BIA CBCC for insult of the			
	Digikey		3		CONN MOD JACK R/A 6P6C for input signal			
A98356-ND	Digikey		3		TERM BLOCK 3POS SIDE ENTRY 5MM			
A98078-ND	Digikey		3		TERM BLOCK 4POS SIDE ENTRY 5MM			
Power supply for GPA (CUI)	Digikey	117.38	3	50	PWR SUPPLY 320W 15V W/FAN		102-2004-ND	

				T	
4-40 nuts	Digikey			H216-ND	
6-32 steel screws	Digikey		For attaching heat sinks to power am		
6-32 nuts	Digikey		For attaching heat sinks to power am	plifiers H220-ND	
GPA Power Supply					
Terminal blocks	Newark		6	94B1168	
				566-5300UE-	
AWG 18 twisted pair	Mouser	197	1	U1000-10	
5 POS barrier jumper	Digikey	1.26	145 jumper for terminal blocks	WM4888-ND	
terminal block 10 pos	McMaster Carr	4.16	70	7527K51	
			need additional terminal blocks to use		
terminal block 10 pos	McMaster Carr	4.16	50 magnet box	7527K51	
Blue terminal lugs (spade)	McMaster Carr	12.6	4 pack of 100	69145K73	
Red terminal lugs	McMaster Carr	12.16	4 pack of 100	69145K67	
Yellow terminal lugs	McMaster Carr	10.52	4 pack of 50	8007K27	
5 POS barrier jumper	Digikey	0.9984	60 jumper for terminal blocks	WM4888-ND	
a v a a a a a a a a a a a a a a a a a a	g,	5.555	Jampan at territoria		
Power supply/GPA housing					
Tower supply/of A riousing			CASE,RACK MOUNT,19 INCH ,88.1	GPB-021	
Box	Jameco	54	1 mmX250mm,	ET2/25B-R	
Fuse 5A 250V	Jameco	0.69	40 FUSE 250V IEC FA HBC 5X20 ROH		
AC plug receptacle	Jameco	0.09	RECEPTACLE, MALE, 10A@250V, FU		
AC plug receptable	Jameco	۷	Switch Rocker ON OFF Single Pole,		
Illuminated rocker switch	Jameco	1.65	4 Throw Quick Connect Rocker 10A 25		
marimated footer switch	Jameco	1.00	THIOW QUICK CONNECT NOCKET TOA 23	AFB1212SHE-	
Fan 12V 120x120x38 mm		8	1 Case fan	4F1A	
			For use with .158" OD AWG 18 twiste		
Grommet 5/32" ID,	McMaster Carr	5.54	1 enclosure	9600K41	
		0.0 .	For use with .158" OD AWG 18 twister		
Grommet 5/32" ID	McMaster Carr	14	1 enclosure	9600K27	
Grommet 1/8" ID	McMaster Carr	3.77	1 Snugger fit for AWG 18 twisted pair	9600K11	
Cable grip straight	McMaster Carr	7.5	1 Includes strain relief	74125K11	
ouble grip straight	IVICIVIASIEI CAII	1.0	i moluuda audiii idiidi	74120111	
For going into production:					
For going into production:			non-illuminated switch with AC recept	tacle	
AC plug receptacle with switch	Jameco	9.95	fused at 6A	2114124	
		9.95	23	117357	
right-angle 6' AC cord	Jameco				
Heat shrink tubing kit	Jameco	20	1 Heat shrink tubing in various colors a		
Large engleaure for CDAs	lamana	100	CASE,RACK MOUNT,19 INCH ,217.		
Large enclosure for GPAs	Jameco	109	23 mmX350mm, (alternative to out-of-stock Jameco) 1	7"v13"v7"	
Bud NHC-14157 enclosure	Mouser	121		7 X13 X7 563-NHC-14157	
			15 no nandles		
Banana plug, panel mount, black	Newark			39F1575	
Banana plug, panel mount, red	Newark		100	39F1574	
Banana plug for wire, male, black	Digikey		50 Solder to wire	J145-ND	
Banana plug for wire, male, red	Digikey		50	J146-ND	
Detention atom for ohim offt	Named	10.5	BOURNS - 3590S-2-503L - POT,	201/2012	
Potentiometer for shim offset current control	Newark	10.5	80 WIREWOUND, 50KOHM, 5%, 2W	62K3213	
			105		
Insulated crimp lug AWG 10-12	Newark		125	93F5817	
DDO seems atom 0 min	Name	1.07	D-sub connector for GPA current mor		
DB9 connector 9-pin	Newark	1.97	20 outpute to the coope	79K4993	
Case fan	Jameco	6	23 80x80x25 mm	688597	
Illiano la cata di constituta		1.05	Switch Rocker ON OFF Single Pole,		
Illuminated rocker switch	Jameco	1.65	20 11:1011 Quick Common 10011		
AC plug receptacle	Jameco	2	23 RECEPTACLE,MALE,10A@250V,FU		
fan guard 92 mm	Jameco	0.75	25	SC92-W2	
terminal blocks 10-pos barrier-style	Newark		need more terminal blocks for inside	the box 28F719	
AWG18 multistranded wire 100'	Newark	85	black	02F6782	
			http://www.amazon.com/Northern-Ind Solderless-Electrical- Terminal/dp/B0000AXFOO/ref=sr_1 ie=UTF8&qid=1357592027&sr=8-	2?	
Terminal lug kit	Amazon.com	20	Zanoj iroras moransim maasanar son		
Contacts	digikey		2 50 CONN TERM CRIMP XH 22-28AWG		
JST XHP-2 connector	digikey		25 CONN HOUSING 2.5MM 2POS	455-2266-ND	
XH crimp tool	digikey	466.56	1 TOOL HAND CRIMP XH 22-28AWG	455-1136-ND	
AWG 14	Digikey	51.3 2 meters	100 feet of cable	C2105B-100-ND	
			inexpensive 100' unshielded twisted p		
ANNO 04 to date discussion and date d	lamana	9.95	2 & white)	105912	
AWG 24 twisted pair unshielded	Jameco	9.93	2 & Wille)	103912	
3-350816-2	Jameco	\$0.15	150 Terminals INSULATED RECP 16-14		

AC power cord 6' long	Jameco	3.5	1	25 6 foot long AC power cord		38041	
AC power cord o long	Jameco	3.3	- '	23 6 look long AC power cord		30041	
Box built by Simon							
Glue 3M Aerosol adhesive #76, 7610A17	McMaster Carr	23.23		5 24 oz. can		7610A17	
Glue for joining plywood edges, 7466A7	McMaster Carr	19.2		2 High tack glue, 1Q bottle		7466A7	
Brass shim stock roll, 9299K12	McMaster Carr	33.61	1	23 Thickness 0.002", W=12", L=120"		9299K12	
Diass silin stock foll, 9255K12	Wiciviaster Carr	33.01	- '	Pick up pre-cut plywood pieces from Boulter		3233K12	
Plywood	Boulter Plywood	\$563		plywood in Somerville, MA, (617) 666-1340			
. 1,		7555		BNC feedthrough for RF TX pulse (might not			
BNC feedthrough	Newark	3.97	1	23 need this!)		93F7596	
SMA feedthrough	Newark		1	23 SMA feedthrough (might not need this)		99H5038	
filtered feedthru	digikey	4.17		50 front power feedthrus,		410-1038-ND	
DC power connector	jameco	1.39		25 plug with pigtail, 2.1x5.5x12		2096763	
DC power connector	jameco	0.39		25 PCB mount male 2.1x5.5mm		137673	
DC power connector	jameco	1.39		25 2.5x5.5mm plug with pigtail		2096771	
Brass shim stock	McMaster Carr	1.00	-	1		2000111	
Diago orini otook	Wowldoter Gair			•			
					http://www. amazon. com/gp/offer-		
carts, Buhl PC1642E	amazon	92.64		10 black plastic carts for magnet and electronics	listing/B002KO44LU		
Other stuff							
POWER SUPPLY 24V 6.5A SGL OUTPUT	Digikey	35.5				285-1813-ND	
LZY-22+	Mini Circuits	1495		0.1-200 MHz power amplifier 30W		LZY-22+	
G10/FR4 epoxyglass rod	McMaxster-Carr	16.7		4 GERR.312N expoxyglass rod		8669K32	
, , , ,				. ,,,			
GRADIENT FILTER parts							
Hammond aluminum enclosure	Newark	8		84 Ridgeless aluminum enclosure		81F3791	
Stand-offs for filter boards	Newark	\$24 per 100 pcs		3 1/4" standoffs threaded for 6-32 screws		92N4901	
Nylon screws (pack of 25)	Newark	1.82		10 6-32 screws for use with standoffs		09J5909	
Nyion screws (pack or 25)	INCWAIN	1.02		10 0-02 sciews for use with standons		0303303	
Inductor power 2.1UH 10A SMD	Digikey	0.88	-	60 Inductor for LC lowpass circuit		587-1693-1-ND	
inductor power 2. Torr Tox SWID	Digikey	0.00		ou inductor for EC lowpass circuit		SRP1250-	
Inductor power 7.8 UH 10A SMD	Digikey	0.84	1	60 Inductor for LC lowpass circuit		7R8MCT-ND	
Inductor power 5.6UH 10A SMD	Digikey	1.23		60 Inductor for LC lowpass circuit		541-1354-1-ND	
inductor power 5.0011 TOA GIVID	Digikey	1.20		Feed through capacitor for interface between		041-1004-1-ND	
Feed through capacitor	Digikey	4.17	2	00 gradient filter enclosure and magnet box		410-1038-ND	
Filter capacitors 2200 pF 1206 surface mount	Newark	0.13		00 NP0		47C8783	
Filter capacitors 820 pF 1206 surface mount	Newark	0.15		00 NP0		70K9344	
Titler capacitors 620 pt 1200 surface mount	INCWAIR	0.15		00 141 0		70103344	
General use							
CMA flames (Americana)				SMA flange for TR modules, RF coil chassis,		00115000	
SMA flange (Amphenol)	Newark	6.11		90 etc.		99H5033	
2-56 screws for mounting SMA flanges	Amazon.com					94070A106	
4-40 screws brass	McMaster Carr			2		93135A271	
4-40 Nylon screws	McMaster Carr			1		93135A272	
4-40 Nylon screws	McMaster Carr			2		93135A276	
4-40 Nylon screws	McMaster Carr			1		93135A279	
Helping hand	McMaster Carr	18		3		5007A12	
8-32 nuts	McMaster Carr			4		90480A009	
8-32 screws	McMaster Carr			4 for mounting terminal blocks in enclosure		91735A194	
				cart			
6-32 steel screws 1.5" long pan head	McMaster Carr			2 for mounting fans to front panel		90272A157	
6-32 nuts	McMaster Carr			2 for mounting fans to front panel		91841A007	
				for gradient filter boards and for pre-amp/tr			
1902BK-ND	digikey	0.4585	1	75 switch board			
				18-8 SS Pan Head Phillips Machine Screw 4-40			
91772A117	McMaster Carr	\$4.57		1 Thread, 11/16" Length, packs of 100			
047704440	14-14: 1 0	64.00		18-8 SS Pan Head Phillips Machine Screw 4-40			
91772A112	McMaster Carr	\$4.32		1 Thread, 5/8" Length, packs of 100			
93135A271	McMaster Carr	£4.00		Nylon Pan Head Machine Screw Phillips, 4-40			
	iviciviasiei Caff	\$4.89		3 Thread, 3/16" Length, packs of 100			

					http://www.amazon.com/Cosmos-Aluminum-Cooling-
heat sinks for MEDUSA chips	Amazon	8	2 pack of 20 heat sinks		Heatsinks-cooler/dp/B007XACV8O/ref=pd_sim_pc_1
standoffs 6-32 hex 1" male-to-female	McMaster Carr	13	1 packge of 50	92745A346	
standoffs 6-32 hex 3/4" male-to-female	McMaster Carr	13	1 package of 50	92745A344	
standoffs 6-32 hex 1-1/4"	McMaster Carr	15	1 package of 50	92745A347	
switch for MEDUSA	Digikey	1.8	25 momentary push button switch (normally open)	EG1930-ND	
			couldn't find 0.75" 6-32 female-female standoffs		
standoffs aluminum 6-32 0.75" long	Digikey	0.5	4 in nylon	2211K-ND	
SMD291AX10	Jameco	\$22.95	3 solder paste		
Pre-amp/TR switch					
Hammond 1590B enclosure	Newark	6.6	24 enclosure for TR modules	81F3791	
			transmit path from RF pwoer amp into TR		
BNC feed through bulkhead	Digikey	3.5	24 module	A32335-ND	
GALI-74+	Minicircuits	2.1	100 Amplifier		
SCLF-10+	Minicircuits	8.4	25 10 Mhz LP filter		
P91W-1BK-ND	digikey	0.097	50 91 Ohm resistor		
NCP1117DT12GOS-ND	digikey	0.35	50 12 V regulator		
445-3937-1-ND	digikey	0.12	250 2.2uF capacitors		
MJE243GOS-ND	digikey	0.57	10 power npn		
445-3942-1-ND	digikey	0.33	100 10 uF capacitors		
M8654-ND	digikey	0.75	50 68 uH choke		
M8647-ND	digikey	0.6	50 2.2 uH choke		
191652	Jameco	9.95	1 15 V 1A unregulated linear power supply		
101179	Jameco	0.39	30 power supply jacks		
191652	Jameco	9.95	1 25 15V 1A unregulated linear power supply		
MPSA13RLRAGOSCT-ND		0.2132	50 TRANS NPN DARL SS 30V TO92		
MC7805CT-BPMS-ND	digikey	0.2132			
	digikey		50 IC REG LDO 5V 1.5A TO220		
P91W-1BK-ND	digikey	0.1318	50 RES 91 OHM 1W 5% METAL OXIDE		
NCP7812TGOS-ND	digikey	0.3624	50 IC REG LDO 12V 1A TO-220-3		
M8654-ND	digikey	0.75	50 CHOKE RF MOLDED 68UH 10% FERRITE		
M8647-ND	digikey	0.6094	50 CHOKE RF MOLDED 2.2UH 10% FERRIT		
399-7043-1-ND	digikey	0.1176	250 CAP CER 0.1UF 100V 10% X7R 1210		
P33W-1BK-ND	digikey	0.1318	50 RES 33 OHM 1W 5% METAL OXIDE		
CF14JT2K70CT-ND	digikey	0.0219	100 RES 2.7K OHM 1/4W 5% CARBON FILM		
RS150-ND	digikey	16.95	2 KIT RES 1.0-1.0M 1/2W 73 VALUES		
P27W-1BK-ND	digikey	0.1318	50 RES 27 OHM 1W 5% METAL OXIDE		
60-5-5-ND	digikey	6.06	1 SOLDER-WICK NO-CLEAN .145" 5'		
60-4-5-ND	digikey	5.56	2 SOLDER-WICK NO-CLEAN .110" 5'		
		0.00	2.1 mm plug with pigtail, 10 per package		http://www.amazon.com/VideoSecu-Security-Camera-Pigtail-C58/dp/B000S7AQF4/ref=sr_1_6? s=electronics&ie=UTF8&qid=1357938682&sr=1-
2.1 mm plug with pigtail	amazon	9.99	1 (jameco part was backordered)		6&keywords=2.1mm+Plug+Power+Pigtail
DCCORD2.5	jameco	1.39	25 2.5 mm plug with pigtail		
4602-RC-ND	digikey	1.1344	1 25 CHOKE RF VARNISHED 1.0UH 20%		
MC7824CTGOS-ND	digikey	0.3624	1 25 IC REG LDO 24V 1A TO220AB		
HS114-ND	digikey	0.58	1 25 HEATSINK TO-220 DUAL 10W		
HS374-ND	digikey	2.67 1?	1 HEATSINK TO-220 W/PINS BLK 2"		
MC7808CT-BPMS-ND	digikey	0.48	5 IC REG LDO 8V 1.5A TO220		
KA7810ETUFS-ND	digikey	0.65	5 IC REG LDO 10V 1A TO-220		
			RF Connectors SMA Female Right Angle PCB		
CONSMA002	mouser	\$3.03	25 Mount		
MA4P7001F-1072	richardsonrfpd	\$1.92	2 50 RF PIN Diode		
TX Amplifier gating circuit					
BJT 3904 NPN	Digikey		1	TIP32AFS-ND	
BJT TIP32A PNP 3 amp	Digikey		1	2N3904-APTB-NE)
1Kohm resistor	Digikey		2 1210 package surface mount	P1.0KVCT-ND	,
4.7Kohm resistor	Digikey		1 1210 package surface mount	P4.7KVCT-ND	
T. I NOTHITI TO SIGNOT	Diginey		1 1210 package surface mount	14.//(\01-14D	
Phantoms					
riiantonis			STRIPPED MOUSE BRAIN 25/PK NC9800809		
Mouse brains (25 frozen brains)	Fisher scientific	165	1 No. 550051	NC9800809	
			1.5 mm OD, 1 mm ID capillary tube (package		
LG-9060-106	Wilmad-Labglass	\$14.12	1 qty 100)		

Windle Longing S1-32	WO 4005 0 54	1477 11 1		No.5 OD 311 1.1 () 1 ()		
Comment Comm	WG-1365-2.5A	Wilmad-Labglass \$1.42		2.5 mm OD capillary tube (package qty 1)		
Ministration 1	WG-1365-2	Wilmad-Labglass \$1.32	20			
March Marc						
15-14-15	WG-1364-2-203M	Wilmad-Labglass \$10.03	· · · · · · · · · · · · · · · · · · ·			
Wilder Wilder Schools Wilder Schoo						
X Power Array				sealed		
NOTTIVE SCORES	WG-4000-7	Wilmad-Labglass \$330.48		100 pack of 10mm tubes		
NOTTIVE SCORES						
APTILLE Communication Communication Communication Communication Communication Communication Communication Color Communication Color Co	TX Power Amp					
### M2784		Communication				
Marcian Marc	AN779L		.			
ANTTHING Concepts						
MC24000-940 digitary 0.57 19 Doctor rom Park 2450 gill proper irms, needs 247 DC	AN779H 28V		.			
MINISTRATE 1906 100 10			10) nower non		
214-50 MinCreatis 215 1 10 prover 1 1 10 p	WOLE-10000 HD	digitey 0.07	1			
2	7HI -3Δ	MiniCircuite 215	1 10			
214997 James	ZHE-SA	Williamonoulo	1 1	power		
21:4507_ Almano	0444000 1	1.00	0.0	0.4		
1,444, 1,445						
## And Provided ## And Provide						wrong size for 24V power supply for RFPA
24.34	174845 Jameco	Jameco 15.95	15			
TX Power regulator and blanking circuit TX-Power regulator TX-Po						
174845 Jameso	ZHL-3A	MiniCircuits 215	1 12	2 power		
174845 Jameso						
174845 Jameso	TX Power regulator and blanking circuit					
SSP-CUS-5470		Jameco 15 95	10	24V 1amp linear regulated power supply		
Second S						
Cabing 944398 Nevark 3.15 25 Amphenol connex, bulihead BNC jack/jack Amphenol Connects coax cable assembly, not using 25T0737 Nevark 6.63 25 Elen KRSB, 8° 25 Start RSB, 8° 25 S						
96H4399 Newark 3.16 25 Amphenot Connex coat cable assembly, not using power amp to front feedthrough (transmit) 14R7742 Newark 10.26 25 SNA 174, 6" power amp to front feedthrough (transmit) 14R7742 Newark 10.26 25 SNA 174, 6" power amp to front feedthrough (transmit) 14R7745 Newark 13.49 power amp to front feedthrough (transmit) 15 SNA 174, 6" power amp to front feedthrough (transmit) 15 SNA 174, 6" power amp to front feedthrough (transmit) power amp to front feedthrough (transmit) 15 SNA 174, 6" power amp to front feedthrough (transmit) power amp to front feedthrough (transm	300011	monaster \$3.74		pusit-in grominet pack or 100		
9914399 Newark 3.16 25 Amphenot connex cubic easemby, Amphenot Connex coate assembly, and using process of the coate of th						
19944999 Nevarik 3-16 25 Amphenic Connect collection connect. bulkhead BNC jaculpick Amphenic Connect collections with a second collection of the second collection						
19944999 Nevarik 3-16 25 Amphenic Connect collection connect. bulkhead BNC jaculpick Amphenic Connect collections with a second collection of the second collection						
2510736	Cabling					
2510736	99H4399	Newark 3.16	25	Amphenol connex, bulkhead BNC jack/jack		wrong part; is insulated from case
25 SNA (174, 6)				Amphenol Connecex coax cable assembly,		<u> </u>
2510737 Newark 6.63 25 BNA RG83 25	25T0736	Newark \$6.2	25			not using
25 SMR (74.2 Newark 10.2 25 SMR (74.3 Newark 10.2 Newark						g
Amphenol Connecex coax cable assembly,	25T0737	Newark 6.63	25			power amp to front feedthrough (transmit)
14R7742						J
MeWark 13.49	14R7742	Newark 10.26	2!			not using
1487745 Newark 13.49 25 SMA 174, 36 Emerson coax cable assembly, SMA-BNC medusa transmit to power amp (transmit)			_			
Emerson coax cable assembly, SMA-BNC 25 RO316, 38° 25 RO	14R7745	Newark 13 49	2!			front feedthrough to medusa (receive)
22151716 Newark 9.69 25 RG316, 36" medusa transmit to power amp (transmit)	111111111111111111111111111111111111111	TO TO				nontrodumough to moduca (rodono)
2375171 Newark 7.45 5 USB type A male to USB type B male () Strict St	22H5716	Newark 9.69	21			medusa transmit to nower amn (transmit)
Section Newark Section Secti						medada transmit to power amp (transmit)
Amphenol Connecex coax cable assembly, accidental duplicate (will be canceled) (newark is out at mouser and digikey manifacturer pn: 135101-02-36. Amphenol Connecex coax cable assembly, preamp out to front feedthrough (newark is out available mouser manifacturer pn: 135101-02-36. Amphenol Connecex coax cable assembly, preamp out to front feedthrough (newark is out available mouser manifacturer pn: 135101-02-36. Amphenol Connec 112437 BNC [ack-jack, proper non-isolated mouser manifacturer pn: 135101-02-12.00 Amphenol SMA St Plug Iso St Plug RG-58. 24 15101-19-24.00 Amphenol SMA St Plug Iso St Plug RG-58. 24 152						
1487745 Newark 13.49 25 SMA 174, 36	81C9214	Newark 8.43		Power strip, 6 outlet, 15A, 120V, 41t		
1487745 Newark 13.49 25 SMA 174, 36						
Amphenol Connecex coax cable assembly, preamp out to front feedthrough (newark is out available mouser manifacturer pri: 135110-02-12.00)						
1487794 Newark 12.43 25 SMA 174, 12, SMA bulkhead, SMA mouser manfacturer pr.: 135110-02-12.00	14R7745	Newark 13.49	25			
## Amphenol Connex 112437 BNC jack-jack, proper non-isolated ## Amphenol BNC St Plug-BNC St Plug RG-58 24 to be cut for preamp/TR board to front feedthrough Tx Amphenol BNC St Plug-BNC St Plug RG-174/U to be cut for roil to preamp/TR board 1 front feedthrough Tx Amphenol BNC St Plug RG-174/U to be cut for coil to preamp/TR board 1 front feedthrough Tx Amphenol SMA St Plug to St Plug RG-174/U to be cut for coil to preamp/TR board 1 front feedthrough Tx Amphenol SMA St Plug to St Plug RG-174/U to be cut for coil to preamp/TR board 1 front feedthrough Tx Amphenol SMA St Plug RG-174/U to be cut for coil to preamp/TR board 2 front feedthrough Tx Amphenol SMA St Plug RG-174/U to be cut for coil to preamp/TR board 2 front feedthrough (completes newark or 6FT2424.5 fox 2.1 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2424.5 fox 2.5 front plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT2425.5 for plug to pigtall 5 front feedthrough (completes newark or 6FT24						
99H4395 Newark 2.89 25 bulkhead, not-isolated Amphenoi BNC St Plug-BNC St Plug	14R7794	Newark 12.43	25			mouser manfacturer pn: 135110-02-12.00)
Amphenoi BNC St Plug RG-58 24 to be cut for preamp/TR board to front feedthrough Tx 15101-19-24.00 mouser \$13.21 to be cut for coil to preamp/TR board to front feedthrough Tx 135101-02-36.00 mouser \$13.21 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 155101-02-12.00 mouser \$12.43 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board to front feedthrough Tx 12 to be cut for coil to preamp/TR board and preamp to be cut for coil to preamp/TR board and preamp to be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp/TR board and preamp to be determined be cut for coil to preamp to be determined be cut for coil to preamp to be determined be cut for						
115101-19-24.00 mouser \$8.09 mouser \$8.09 mouser \$13.21 m.	99H4395	Newark 2.89	25			proper non-isolated
Amphenol SMA St Plug to St Plug RG-174/U 12 24" 10 be cut for coil to preamp/TR board 12 24" 24"						
13510-02-36.00 mouser \$13.21 12 24" to be cut for coil to preamp/TR board Amphenol SMA St BH JK to St Plug RG-174/U 135110-02-12.00 mouser \$12.43 12 12" preamp out to front feedthrough (completes newark or 6FT#245.5X2.1 jameco \$1.39 36 2.1mm jack to pigtail 5CCORD2.5 jameco \$1.39 25 2.5 mm plug to pigtail 5CCORD2.5 jameco \$1.39 2.5 j	115101-19-24.00	mouser \$8.09	12			to be cut for preamp/TR board to front feedthrough Tx
Amphenol SMA St BH JK to St Plug RG-174/U 153110-02-12.00 mouser \$12.43 12 12" 6FT#245.5X2.1 jameco \$1.39 36 2.1mm jack to pigtail 5FT#245.5X2.5 jameco \$1.39 25 2.5 mm plug to pigtail 5ECORD2.5 jameco \$1.39 25 2.5 mm plug to pigtail						
135110-02-12.00 mouser \$12.43 12 12" means of FT#245.5X2.1 jameco \$1.39 36 2.1mm jack to pigtail merco \$1.39 25 2.5 mm plug to pigtail \$1.39 25 2.5	135101-02-36.00	mouser \$13.21	12			to be cut for coil to preamp/TR board
Sertification						
SET#245.5X2.1 jameco	135110-02-12.00	mouser \$12.43	12	2 12"		preamp out to front feedthrough (completes newark order)
6FT#245.5X2.5 jameco \$1.39 25 2.5 mm plug to pigtail DCCORD2.5 jameco \$1.39 25 2.5 mm plug to pigtail USB type A male to type B male cable Digikey 3.86 20 USB type A male to USB type B male, 3m, MEDUSA and DACs terminal block board mount 4-pos Digikey 70 terminal block 4-position use between GND and +12V on the DAC board anale jumper 2-position Digikey 75 terminal block 3 position use between GND and +12V on the DAC board anale jumper 2-position Digikey 75 terminal block 2-position 0 pigkey 100 for MEDUSA reset button at JP12 on backplane female socket 2-position 0 Digikey 25 box SC92-W2 MIDUSA mapplied magnets \$0.69 50 shirm magnets	6FT#245.5X2.1	jameco \$1.39	36	2.1mm jack to pigtail		
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USB type A male to type B male cable Digikey 3.86 20 USB type A male to USB type B male, 3m, MEDUSA and DACS terminal block board mount 4-pos Digikey Digikey Digikey To terminal block 4 -position use between GND and +12V on the DAC board male jumper 2-position place of the male socket 2-position female socket 2-position Digikey Digik						
MEDUSA and DACs terminal block board mount 4-pos Digikey Digik					AE40200 ND	
terminal block board mount 4-pos Digikey Digik	USB type A male to type B male cable	Digikey 3.86	20	USD type A male to USB type B male, 3m,	AE10360-ND	
terminal block board mount 4-pos Digikey Digik						
terminal block board mount 4-pos Digikey Digik						
clamp diode 1N914 Digikey Digikey T75 use between GND and +12V on the DAC board terminal blocks Digikey T75 terminal blocks Digikey T85 terminal blocks T85 terminal blocks T85 terminal blocks T85 terminal blocks T85 terminal block T85 termin						
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clamp diode 1N914 Digikey 75 terminal blocks 1N914BCT-ND use with terminal block on DAC board Male jumper 2-position Digikey 26 for reset button at JP12 on backplane 5 for reset button on MEDUSA JP12 on backplane 6 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane 7 for reset button on MEDUSA JP12 on backplane				use between GND and +12V on the DAC board		
male jumper 2-position place of the male socket 2-position place of the mean o	clamp diode 1N914	Digikey	75	terminal blocks	1N914BCT-ND	use with terminal block on DAC board
female socket 2-position Digikey 26 for reset button to let heat out through the top of the MEDUSA SC92-W2 mini halbach ND033 applied magnets \$0.69 50 shim magnets			100	for MEDUSA reset button at JP12 on backplane	XG8T-0231-ND	for reset button on MEDUSA JP12 on backplane
fan guard 92 mm Jameco 0.75 25 to let heat out through the top of the MEDUSA box SC92-W2 mini halbach ND033 applied magnets \$0.69 50 shim magnets						
fan guard 92 mm Jameco 0.75 25 box SC92-W2 mini halbach ND033 applied magnets \$0.69 50 shim magnets	Tomaio occiner & position	2.gincy	20		711000-10-14D	
mini halbach ND033 applied magnets \$0.69 50 shim magnets	fan guard 92 mm	Jameco 0.75	21		SC92-W2	
ND033 applied magnets \$0.69 50 shim magnets	3 02	0.70	20	, , = =	3002 112	
ND033 applied magnets \$0.69 50 shim magnets						
ND033 applied magnets \$0.69 50 shim magnets						
NB001 applied magnets \$0.85 20 shim magnets						
applied magnete 90.00 = 0 mm magnete	NB001	applied magnets \$0.85	20	shim magnets		

NB007	applied magnets	\$0.27	50 shim magnets	
Oscilloscope stuff				
CF14JT10M0CT-ND	Digikey	\$0.01624	250 10MOhm resistor	
MEC-10MM	PCH Cables Inc	\$2.9	10 DB9 to DB9, 10'	
1958659	Jameco	\$0.35	30 18 V voltage regulator	
23579	Jameco	\$0.29	30 adjustable voltage regulator	
229738	Jameco	\$3.25	3 usb cable, 10', usb-a male to usb-b male	
INA105KU-ND	digikey	\$8.66	10 IC opamp diff 1 MHZ 8SOIC	
296-13645-1-ND	digikey	\$6.9	INA217, IC OPAMP INSTR 3.4MHZ SGL 8 16SOIC	