

open-UST Bill of Materials v1

Off-the-shelf components for transducer modules:

Item	Quantity per standard module	Unit	Manufacturer	Mfr. Part Number	Supplier Link
34-Way Screened Round Ribbon Cable	2.5	m	3M	3659-3	RS 120-9135
PZT elements: Plate 10.00mm x 1.00mm x 1.00mm 850-material	16	ea	American Piezo Ceramics	689	American Piezo Ceramics
34-Way IDC Connector Socket for Cable Mount, 2-Row	2	ea	Amphenol	T812134A100CEU	RS 832-3639
					Farnell
34-Way 2-Row Right Angle SMT Header	2	ea	Samtec	TSM-117-01-L-DH	RS 208-6460
Brass Hex Standoff Female/Female, 6mm, M3 x M3	4	ea	Würth Elektronik	970060354	Mouser
M3 Brass Threaded Insert diameter 4mm Depth 4.78mm	4	ea	RS PRO	278-534	RS 184-2804
M3 x 6mm Hex Socket Button Screw	12	ea	RS PRO	822-9098	RS 278-534
M5 x 30 mm Nylon Screw (Cheese Head)	4	ea	RS PRO	291-262	RS 822-9098
M5 x 20 mm Nylon Screw (Cheese Head)	3	ea	RS PRO	527-757	RS 291-262
Heat Shrink Tubing, Black 19mm Sleeve Dia. x 5m Length 2:1 Ratio	30	mm	RS PRO	700-4664	RS 527-757
					RS 700-4664

Consumable materials for transducer modules:

Item	Quantity per standard module	Unit	Manufacturer	Mfr. Part Number	Supplier Link
Silver Conductive Adhesive Epoxy	0.5	g	MG Chemicals	8331-14G	RS 918-5002
5 micron Tungsten Powder	53	g	Tungsten Alloys	-	Tungsten Alloys
Araldite Standard Epoxy Adhesive	14	ml	Araldite	ARA-400003	RS 756-0114
AptFlex F7 Acoustic Encapsulation	20	ml	Precision Acoustics	APLF7NC	RS 756-0114
Polyamide/Kapton Tape	300	mm	Tesa	51408-00008-00	Precision Acoustics
Copper Foil 210mm L, 160mm W, 0.03mm Thickness	1	sheet	Sunhayato	T-160C	RS 436-2778
GlassCast 10 Clear Epoxy Casting Resin	16	ml	Easy Composites	EP-G10-1	RS 634-8998
Super White CULR Epoxy Pigment	2	ml	Easy Composites	PG-CU-SW-002	Easy Composites
Loctite EA9455	2	ml	Henkel	451277	Easy Composites
Loctite 3090 2K Cyanoacrylate	2	g	Henkel	3090	RS 458-9513
					Farnell

Off-the-shelf components for DL5-260P plug assembly:

Item	Quantity for one plug (128 channel)	Unit	Manufacturer	Mfr. Part Number	Supplier Link
M3 x 30mm Hex Socket Cap Screw Black	2	ea	RS PRO	467-9846	RS 467-9846
M3 x 10mm Hex Socket Button Screw	18	ea	RS PRO	281-192	RS 281-192
AMPMODU 20 Way 2 Row Straight PCB Socket	1	ea	TE Connectivity	1-215307-0	RS 495-8701
AMPMODU 4 Way 2 Row Straight PCB Socket	8	ea	TE Connectivity	215307-2	Farnell
					RS 828-1547
24 Way, 2 Row, straight pin header	1	ea	Würth Elektronik	61302421121	Digikey
8 Way, 2 Row, straight pin header	1	ea	Würth Elektronik	61300821121	RS 828-1525
DL5-260PW6A Plug with square post pins	1	ea	ITT Cannon	DL5-260PW6A	Farnell
5650M zero-ohm link	16	ea	Yageo	RC2010JK-070RL	RS 198-8503

Other Consumable Materials

Item			Manufacturer	Mfr. Part Number	Supplier Link
Acetone			RS PRO	918-1082	RS 918-1082
Isopropyl Alcohol			RS PRO	227-4427	RS 227-4427
White PLA Filament 2.85mm			RS PRO	832-0273	RS 832-0273
PVA-M Filament 2.85mm			Dutch Filaments	246190101	3DFilePrint
Steel 0.2 mm shim stock			RS PRO	518-879	RS 518-879
10mm Acrylic Sheet			Any		
Bathroom silicone sealant			Any		
Electrical Tape			Any		
Petroleum Jelly			Vaseline		
Washable PVA adhesive			Rymans	680155586	Rymans