

ACTIVE AND PASSIVE COMPONENTS

	Website/Contact	Comments
Increasing Websites Microwave 101	www.microwave101.com	Check /encyclopedia/connectors for info about connectors and connector care.
MotionNet Engineering Directory	http://www.motionnet.com/	Great directory website, we have used at Michigan for motors, etc.
Active components Amplifiers		
Phase One Microwave	Richard Singleton (ATSM) richard.singleton@atsm.com Chuck Allen chuckallen@phase1mw.com	Good variety and performance through MMW, helpful
Chao Wireless	Glen Wasylewski glen@chaowireless.com	Very helpful, but only low power and medium performance
Miteq	Mitch Haft mhaft@miteq.com	Good variety, but hard to get quotes and assistance
Hitite	www.hitite.com Hitite distributor in SD: 858-625-2800	Analog phase shifter only
Endwave Corporation	Neal Austin Tel: 408-522-3137 Fax: 408-522-3102 neal.austin@endwave.com	JCA Amplifiers
Mimix Broadband	KSA Electronics Sales Rep. Erik Simonsen (San Diego) erik@ksa.com Tel: 619-502-9204 www.mimixbroadband.com www.ksa.com	Die and packaged GaAs based RFIC's, MMIC's, and FET's, wideband MMIC's up to 40 GHz
Mixers		
Eclipse Microwave	Roden Nunez roden.nunez@verizon.net	limited selection
Marki Microwave Hitite	www.markimicrowave.com www.hitite.com Hitite distributor in SD: 858-625-2800	Good selection, fast quote Analog phase shifter only
Mimix Broadband	KSA Electronics Sales Rep. Erik Simonsen (San Diego) erik@ksa.com Tel: 619-502-9204 www.mimixbroadband.com www.ksa.com	
Noise sources Agilent	Jim Balderama jim.balderama@agilent.com www.agilent.com	

Noise/Com	http://www.noisecom.com/	
Detectors		Good diode detector
Krytar	Roden Nunez roden.nunez@verizon.net Don Yoshii dyoshii@krytar.com	
Passive components		Excellent performance, expensive
Couplers, Dividers		
Krytar	Roden Nunez roden.nunez@verizon.net Don Yoshii dyoshii@krytar.com www.nardamicrowave.com	Bought used ones from WTS
Narda		From DC to 8 GHz and some to 18 GHz.
MECA Electronics, Inc.	email: sales@e-meca.com Phone : 973-625-0661 http://www.e-meca.com	Used Components
Western Test Systems	Phil Schnabel Tel: 1-800-538-1493 wtsystems@uswest.net http://www.westerntestsystems.com/	
Advanced Technical Materials (ATM), Inc.	Mark Hoffman Tel: (858) 784-0900 Fax: (858) 784-0909 mhoffman@acetec.com http://www.atmmicrowave.com/ http://www.mdllab.com/	
MDL - Microwave Development Laboratories	California Contacts: Dave French (714) 636-5758 (T) (928) 597-5457 (F) Richard Singleton (949) 240-7783 (T) (949) 240-7361 (F) Chuck Pellerin (626) 963-9767 (T) (626) 335-5903 (F) Tony Pina tony@atasm.com http://aptecelectronics.com stu@aptecelectronics.com Tel: 310-640-7262 Fax: 310-640-8266	
Aptec Electronics		
Surplus Sales of Nebraska	http://www.surplussales.com grinnell@surplussales.com Tel: 402-346-4750 Fax: 402-346-2939	

Picosecond pulse labs	Schoen Kipp Tel: (303)-209-8100	High voltage bias-tees (100v), Fast and reliable. They only take 2 weeks even if it is custom order (at least on bias tees)
Inmet	Carolyn Moon Carolyn.Moon@aeroflex-inmet.com	Professor Rebeiz has friends here
MECA Electronics, Inc.	email: sales@e-meca.com Phone : 973-625-0661 http://www.e-meca.com	From DC to 8 GHz and some to 18 GHz.
Anritsu	Vicki Williams Tel: 1-800-267-4878	Part no.: K251 (50kHz-40GHz) Ask for university discount and the part usually takes 2-3weeks to come
Advanced Technical Materials (ATM), Inc.	Mark Hoffman Tel: (858) 784-0900 Fax: (858) 784-0909 mhoffman@acetec.com http://www.atmmicrowave.com/	
Attenuators, Loads, DC blocks		
Inmet	Carolyn Moon Carolyn.Moon@aeroflex-inmet.com	Professor Rebeiz has friends here
Weinschel	www.weinschel.com	
SV Microwave	www.svmicro.com	
Western Test Systems	Phil Schnabel Tel: 1-800-538-1493 wtsystems@uswest.net http://www.westerntestsystems.com/	Used Components
Advanced Technical Materials (ATM), Inc.	Mark Hoffman Tel: (858) 784-0900 Fax: (858) 784-0909 mhoffman@acetec.com http://www.atmmicrowave.com/ http://www.mdlab.com/	
MDL - Microwave Development Laboratories	California Contacts: Dave French Tel: (714) 636-5758 Fax: (928) 597-5457 Richard Singleton Tel: (949) 240-7783 Fax: (949) 240-7361 Chuck Pellerin Tel: (626) 963-9767 Fax: (626) 335-5903 Tony Pina tony@atm.com	
Aptec Electronics	http://aptecelectronics.com stu@aptecelectronics.com Tel: 310-640-7262 Fax: 310-640-8266	

Surplus Sales of Nebraska	http://www.surplusales.com grinnell@surplusales.com Tel: 402-348-4750 Fax: 402-348-2939	
Cables		General purpose up to 18GHz. Model: MF-141 "Multiflex", various lengths available (18", 24", 36" in lab)
Huber-Suhner	Steve Swift (or anyone at CWN Swift) Tel: (800) 842-7632	High frequency cables. Be warned that they take more than 2-4 weeks even if it is stock.
Mega Phase	Joe Carbonaro Tel: (570) 424-4188	
Rosenberger Company	http://www.rosenberger.de Mark Hoffman Tel: (858) 784-0600 Fax: (858) 784-0600 mhoffman@aceler.com	
Advanced Technical Materials (ATM), Inc.		
Coaxial Adapters		Professor Rebeiz has friends there
Inmet	Carolyn Moon Carolyn.Moon@easrflex-inmet.com	
Krytar	Roden Nunez roden.nunez@verizon.net Don Yoshii dtyoshii@krytar.com	
Weinschel	www.weinschel.com	
Western Test Systems	Phil Schnabel Tel: 1-800-538-1493 wsystems@western.net http://www.westernsystems.com/	Used Components
Advanced Technical Materials (ATM), Inc.	Mark Hoffman Tel: (858) 784-0600 Fax: (858) 784-0600 mhoffman@aceler.com http://www.atmicrowave.com/	
RLC Electronics, Inc.	Pete Jeffery Phone: 814-241-1334 Fax: 814-241-1753 pjeffery@rlcelectronics.com	Coaxial-to-waveguide adapters
Surplus Sales of Nebraska	http://www.surplusales.com grinnell@surplusales.com Tel: 402-348-4750 Fax: 402-348-2939	Coaxial-to-waveguide adapters
K and V Coaxial Transitions		
Antitec Company	www.antitec.com	
Rosenberger Company	http://www.rosenberger.de	
Dorado	gsaradon@aol.com	Inexpensive, long lead time

	Millimeterwave Product Inc.	<p>Fax: 310-320-9968 lisa@caintech.com</p> <p>Mark Smith Phone: 603-569-0004 Fax: 603-569-0008 sales@miwv.com</p> <p>http://www.mdllab.com/</p> <p>California Contacts:</p> <p>Dave French Tel: (714) 636-5758 Fax: (928) 597-5457</p> <p>Richard Singleton Tel: (949) 240-7783 Fax: (949) 240-7361</p> <p>Chuck Pellerin Tel: (626) 963-9767 Fax: (626) 335-5903</p> <p>Tony Pina tony@at-sm.com</p>	
	MDL - Microwave Development Laboratories		
	Phase Shifters		
	Weinschel	www.weinschel.com	
	INMET		
	Hittite	<p>www.hittite.com Hittite distributor in SD: 858-625-2800</p> <p>www.miteq.com</p>	Analog phase shifter only
	Miteq Inc.		
	Western Test Systems	<p>Phil Schnabel Tel: 1-800-538-1493 wtstestsystems@uswest.net http://www.westerntestsystems.com/</p> <p>Mark Hoffman Tel: (858) 784-0900 Fax: (858) 784-0909 mhoffman@acetec.com http://www.atmmicrowave.com/ http://www.mdllab.com/</p>	Used Components
	Advanced Technical Materials (ATM), Inc.		
	MDL - Microwave Development Laboratories	<p>California Contacts:</p> <p>Dave French Tel: (714) 636-5758 Fax: (928) 597-5457</p> <p>Richard Singleton Tel: (949) 240-7783 Fax: (949) 240-7361</p> <p>Chuck Pellerin Tel: (626) 963-9767 Fax: (626) 335-5903</p> <p>Tony Pina tony@at-sm.com</p>	

Isolators and Circulators			
Narda	www.nardamicrowave.com		Bought used ones from WTS
Ditorn	www.ditorn.com		
MECA Electronics, Inc.	email: sales@e-meca.com Phone : 973-625-0661 http://www.e-meca.com http://www.mdtdcorp.com/		From DC to 8 GHz and some to 18 GHz.
Microwave Device Technology			They have ferrite isolators, waveguide transitions.
Western Test Systems	Phil Schnabel Tel: 1-800-538-1493 wtsystems@uswest.net http://www.westerntestsystems.com/		Used Components
Advanced Technical Materials (ATM), Inc.	Mark Hoffman Tel: (858) 784-0900 Fax: (858) 784-0909 mhoffman@acetec.com http://www.atmmicrowave.com/		
Aptec Electronics	http://aptecelectronics.com stu@aptecelectronics.com Tel: 310-640-7262 Fax: 310-640-8266		
Surplus Sales of Nebraska	http://www.surplussales.com grinnell@surplussales.com Tel: 402-346-4750 Fax: 402-346-2939		
Second Hand Equipments			
Western Test Systems*			
Phil Electronics NW, Inc	Phil Schnabel Tel: 1-800-538-1493 wtsystems@uswest.net http://www.westerntestsystems.com/ http://www.bellnw.com		

Millimeter Wave Components		
Millitech	Tryon Cote Tel: 413-582-9620 ext. 329 Fax: 866-523-5312 tcote@milltech.com www.millimeterwave.com www.spaceklabs.com http://www.wavestreamwireless.com/	Power Amplifiers
ZAX Millimeter Wave Corporation	Socorro Felix Phone: 310-539-8882 Fax: 310-539-8862 sfelix@dt-usa.com	Southern California Distributer is Bob Smith, Tel: 626-339-2830 rwdbsmith@aol.com
Spacek Inc.		
Wave Stream		
Wisewave Technologies Inc.		
Quinstar Technology, Inc.	Rosalie Ruggio Phone: 310-320-1111 ext. 118 Fax: 310-320-9968 lisa@caintech.com	He is Prof. Rebeiz's friend.
Pacific Millimeter	www.pacificmillimeter.com	
Millimeterwave Product Inc.	Mark Smith Phone: 603-569-0004 Fax: 603-569-0008 sales@miwv.com	
Custom Microwave	Dan Jongsma Phone: 303-651-0707 ext. 16 Fax: 303-651-0706 jongsma@custommicrowave.com	
Dorado International	Carolyn Puetz Phone: 206-574-0900 Fax: 206-574-0912 carolyn@dorado-intl.com	
Ace Industries	Jason Phone: 619-482-2700 Fax: 619-482-8643 smerong@aceindustriesinc.com	
Aerowave Inc.	Leon Phone: 781-391-1555 Fax: 781-391-5338 Aerowave.inc@verizon.net	
Microwave Resources Inc.	Hassan Arian Tel: 909-627-4125 Fax: 909-627-4295 hassan@microwaveresources.com	
Western Test Systems	Phil 1-800-538-1493 www.westerntestsystems.com	
Farran Technology	www.farran.com	

ANTENNAS AND WAVEGUIDES

Antennas and Waveguides (microwave)		
Dorado	doradoint@aol.com	Inexpensive, long lead time
Advanced Technical Materials	Mark Hoffman mhoffman@acetec.com	Inexpensive with short lead but not best quality
Rozendal Associates	Gary info@rozendalassociates.com 619-562-5596	local company (Santee, CA)
ETS- Lindgren	Cary Chai cary@atsemc.com 925-294-9774	Cary is at Altamont Technical Services Expensive company
AH systems	www.ahsystems.com	similar to ETS-Lingren, but may be cheaper
Aerowave	www.aerowave.net	
Pacific Millimeter	www.pacificmillimeter.com	
General Microwave	Not available	
Farran Technology	www.farran.com	
Custom Microwave	www.custommicrowave.com	
Millitech	www.millitech.com	
Quinstar Technology, Inc.	Rosalie Ruggio Phone: 310-320-1111 ext. 118 Fax: 310-320-9968 lisa@caintech.com	
Millimeterwave Product Inc.	Mark Smith Phone: 603-569-0004 Fax: 603-569-0008 sales@miwv.com	
Antenna Measurement		
Orbit FR	Anna Moyer annam@orbitfr.com Curtis Gerwig CGerwig@ssstrf.com	Entire systems
Nearfield Systems	Larry Cohen lcohen@nearfield.com	Entire systems
Newmark Systems	Ryan Marques ryan@newmarksystems.com	Rotation stages (low cost, mech. strong)
Emmerson Cumming	James DelPrete jdelprete@eccosorb.com	Absorber
Advanced Electromagnetics	Gabe Sanchez GSanchez@aemi-inc.com	Absorber (in San Diego)
Aerotech	Chip Meisel CMeisel@aerotech.com	More for optics than microwave
ETS- Lindgren	Cary Chai cary@atsemc.com 925-294-9774	Cary is at Altamont Technical Services Expensive company

FoamCo	Andrea 858-277-3626	They supply foam in whatever shape we need.
AH systems	www.ahsystems.com	
		similar to ETS-Lingren, but may be cheaper