



Telecomm MMIC Products
Brief Summary of some of TLC MMIC Types

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AMPLIFIERS (in Stock)					
TLC Part #	Old TLC Part#	Description	Frequency	Gain	Power (sat)
TLCA01981	TLC KJEN Amplifier	Med Power, Wideband 2x-4x Mult	5-38 GHz	15 dB	>22 dBm
TLCA02981	TLC GB GEN Amp	Med Power & High Gain	20-34 GHz	20 dB	>23 dBm
TLCA03981	TLC GAMP II\ABA Amp	Med Power& 2x-5x Multiplier	5-40+ GHz	15 dB	>20 dBm
TLCP03981	TLC GAMP I	20 to 77GHz Amp/ 2x multipilier	20-77+ GHz	12 dB	>10dBm@77GHz
TLCP04981	TLC GB95W45PA	High Power & Med gain	24-30 GHz	14 dB	>27 dBm
TLCA06981	TLC RAF AMP95	Med. Power & Med Gain	16-30 GHz	15 dB	>21 dBm
MMIC Oscillators/Mixers/Modulators/Chipsets/Switches (in Stock)					
TLC Part#	Old TLC Part#	Description	Frequency		
<i>A. MMIC Oscillators</i>					
TLCO01981 (TLC's "O" Chip)	TLCOSCJG95W33	Multi-func. MMIC Oscillator "O" (Multiply,VCO,ILO,DRO,Mixer)	2-100GHz, >16 dBm@38GHz, -90 dBc/Hz @ 100KHz@77GHz		
TLCO03981	TLCJG-OSC2	Low Phase Noise Oscillator	24-40 GHz, >16 dBm, -110dbc/Hz @ 1MHz		
TLCO04981	ABA-ILO	MMIC Oscillator (ILO)	25-27 GHz, >16dBm		
TLCO05981	TLCKJ-OSC4B	MMIC VCO w/ Vt > 1 GHz	24-32 GHz, >16 dBm		
TLCO06981	VCO-GB2130	MMIC VCO	21-30 GHz, >16 dBm		
<i>B. Mixer, Modulators & Switches</i>					
TLCM01981	MX-JG95W46	Versatile MMIC Mixer (Up and Down Converter)	16 - 44+ GHz 0.2<IF<4+GHz		
TLCM02981	IRM-VS96W47	Complete Image Reject Mixer (Up and Down Converter)	34 - 44+ GHz 0.2<IF<4+ GHz		
TLCPMLB01,02,03,04	VS-QPSK-PM	QPSK/BPSK Phase Modulator	28-32,30-34,32-36,36-40 GHz		
TLC-LPS32, LPS2040, LPS60,77,94 Infinite bit Linear Phase Shifters	New Product (Prototype Stage)	Continuous Linear Phase shifters (~300 radian continuous Linearity)	Narrow 28 to 100 GHz series, Wideband 24 to 100 GHz		
TLCSWY01,02,03	LYO3,04,05	PHEMT switches low loss high speed	1 to 6 GHz		
TLCSWY04	TLCSWY04	Ka-band Switches (nsec.)	28-40 GHz		
<i>C. Doublers / Chipsets</i>					
TLCDO1981	TLC-DB38/77	Ka- to W-Band MMIC Doubler	36-38/75-78 GHz		
TLCDO2981	TLC-DB30/60	Ka- to V-Band MMIC Doubler	29-32/58-65 GHz		
TLCLMDS, TLCDRCS, TLCDRO, TLCVCO, TLCQPS	TLC-CS2430-#	MMIC Chip Sets (LMDS, Digital, Radio, Auto Radar)	9-40 GHz 60 & 77 GHz		
<i>D. Modules / Transceivers/Antenna</i>					
TLCminT24-100	New Product (Prototype Stage)	Miniature Transceiver Chip	24-100 GHz		
TLCSM30-40+, 60, /77	TLCSM30-40, 60,77	Ka to W-Band Source Modules	30-40+, 60, 77GHz		
TLCCMD2480	Ka to W- Band Modules	Ka to W-band custom modules (up&dn conv, Transmit, Receivers)	24 -80 GHz MMIC Modules		
TLC 77XS or TLC77XMT	76 GHz Tranx	Single or Multi-channel 76.5 GHz MMIC Transceivers	>10 dBm, Conversion Gain -100 dBc/Hz, 100KHz@77GHz		
TLC X- to W-Band Micro-Antennas (circular polarized micro antenna)	Dual Use Patch Micro-Antenna	Microantenna micrstrip/waveguide integration through W-Band	>25dBi array for X to W band (10 to 95 GHz series)		

[This is only a partial list of available TLC MMICs products in stock]*

New enhanced performance data sheets are being developed for improved MMICs in stock

*For more MMIC information, purchase orders or custom orders

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