



**Telecom MMICs Products**  
**[Brief Summary of some of TLC MMIC Types]**  
[www.tlcprecision.com](http://www.tlcprecision.com)

**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 multiplier	20-77+GHz	12 dB	>10dBm@77GHz
TLCP04981	TLC GB95W45Power Amp	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
TLCLNA2440		Kaband LNA NF < 3 dB	24 to 40 GHz	20 dB	

**MMIC Oscillator/Mixer/Modulators/Chipsets/Switches (in Stock)**

TLC Part#	Old TLC Part#	Description	Frequency
<i>A. A. MMIC Oscillators</i>			
TLCO01981 (TLC's "O" Chip)	TLCOJC95 W33	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 w/Vt ~800MHz	11-30 GHz, >16 dBm
<i>B.Mixer,Modulators&amp;Switches</i>			
TLCM01981	MX-JG95W46	Versatile MMIC Mixer (Up and Down Converter)	16 - 44+ GHz 0.2<IF<4+GHz
TLCMR2981	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-LPS10, LPS28, LPS32, LPS2040 LPS7794, Infinite bit Linear Phase Shifters	New Product (Prototype stage)	Continuous Linear Phase shifters (~300 radian continuous Linearity)	Narrow 10 to 94 GHz series, Wideband 10-to 94 GHz
TLCSWY01,02,03	LYO3,04,05	PHEMT switches low loss highspeed	1 to 6 GHz
TLCSWY04	TLCSWY04	Ka-band Switches (nsec.)	28-40 GHz
<i>B. 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,AutoRadar)	9-40 GHz 60 & 77 GHz
<i>D. Modules / Transceivers/Antenna</i>			
NEW/PROTOTYPE STAGE TLC minT24-100		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 )
TLC Dual receiver MMIC	24 to 36 GHz	Miniature receiver with VCO mxerLNA & divide by 8 MMIC	24 to 36 GHz

[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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02/11/013