



Summary of Active Devices

Radio Frequency Control Card- RFCC

Device Type #	Component Description	Operating Frequency
74ABT125D	IC BICMOS 74AB	19.6608MHz
VXML14E	VCXO 32.768MHZ	32.768MHz
970-2178-29	OCXO 19.6608MH	19.6608MHz
BRPG1204W-TR	LED BI COLOR R	DC
MMBT3904	TSTR NPN 40V . Voltage follower for VCXO_ADJ	DC
XSTR PNP40V .2	XSTR PNP40V .2	DC
HSM633 40 MHz	OSC 40MHZ CONN	40 MHz
AD826AR	Dual high speed op amp	1.288 MHz 3 MHz
AT259	VOLTAGE CONTROL	DC
GT28F320B3BA110	IC 32 MBIT Flash memory word wide 2048x16	40 MHz max
X03D75810-960 MHz	IC CDMA EXCITE	810-960 MHz
RF2422	IC MODUL QUADR	810-960 MHz
AD9850BRS	IC 125MHZ DDS	3 MHz/19.6608 MHz
MAX3223EAD	IC XCVR RS232	10 KHz
IDT74FCT163344CPA	IC ADR/CLK DRV	40 MHz max
L2A0959	IC ASIC EDTC	19.6608MHz/40 MHz
IDT49FCT3805APY	IC BFFR/CLK DR	40 MHz 19.6608MHz



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XC4020XL-3BG256-1	IC FPGA 20K GA	19.6608MHz/40 MHz
CY7C1021v32-15BAI	IC SRAM 64KX16	16.384 MHz
MAX487ESA	IC RS485 Transceiver	1 Hz 10 kHz
MAX5250BEAP	IC DAC QUAD 10-BIT SERIAL	1 MHz max
MAX148BEAP	IC ADC 8 Channel 10-Bit Serial	1 MHz max
DS92LV010	IC LVDS Transceiver	16.384 MHz 8 kHz 2.048 MHz
M/A-COM /MLS9064-51144	Synthesizer	1125 - 1164 MHz
M/A-COM /MLS9063-50851	Synthesizer	832-870 MHz
National / LM2980	5V Regulator	DC
UPC2776T	IC MMIC IS Amplifier	800 MHz
MSM13R2850-073LS	IC ASIC DBP 256 BGA	200 MHz
REF 192FS	IC REF VOLTAGE	DC
LMC7101A1M5X	IC OP AMP LMC7	20 MHz
RI25033	IC Low Noise Down Converter	20 MHz
XPC860MHCZP50C1	IC POWER QUICC	40 MHz
74ACT244	IC OCT LINE DR	DC
	IC DIFF PECL T IC 1:2 DIFF FA	800 MHz
MC10ELT26	IC 1:2 FANOUT	20 MHz
MC145151-2	IC PLL FREQ SY	800 MHz
MC33269DT-5.0	IC LDO Voltage Regulator	40 MHz
LP2951	IC LDO Voltage Regulator IC LOW PWR J F IC NAND QUAD 2 IC OR QUAD 2 I IC LINE DRVR 0	19.6608 MHz 8 kHz; 1 kHz 800 MHz 800 MHz 800 MHz



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	IC BUFFER 16 B	DC
Motorola/MC74LCX157	IC MUX QUAD 2-	DC;40 MHz
Motorola/MC74LCX16374	IC 16 BIT D/FL	40 MHz
Dallas/DS1706	IC MICRO MONIT	DC
Analog Devices/AD9762AR	IC 12 BIT DIG	1.288 MHz
Analog Devices/AD6600AST	IC AD6600AST 2	19.6608 MHz
NEC/UPC-2708	AMPL BIPOLAR M	238.4 MHz
Analog Devices/TMP-01	IC TEMP. SENSOR/CONTROLLER	DC
Motorola/SY38157BT05RZ	Power QUICC Peripheral Control PPC ASIC	40 MHz
NEC/UPC-2776T	IC MMIC SI AMP	238.4 MHz
NEC/UPC-2776T	IC MMIC SI AMP	238.4 MHz
LT1529IQ	IC LDO Voltage Regulator	DC
M/A-Com/ AM50-0003	IC AMPLIFIER L	800 - 1000 MHz
M/A-Com/ AT259	Voltage Controlled Attenuator	DC
National Semiconductor/LM50C	Temp. sensor IC	DC
Linear Technology/LT1054IS8	Voltage Converter IC	DC
NEC/UP2776	RF Gain block	200 - 900 MHz
NEC/UP2708	RF Gain block	200 - 900 MHz
OKI	DBP ASIC	238 MHz
National Semiconductor/LMC7111	Low Power OP AMP	200 - 900 MHz
Conexant/RI 25033	Low Noise Mixer	200 - 900 MHz
Motorola/ MC79M05BDT	Bipolar Regulator	DC
Motorola/MC10ELT21	Differential PECL/TTL Translator	DC
Motorola/MC10EL11	1:2 Differential Buffer	DC
Motorola/MC33161	Voltage Monitor IC	DC



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Motorola/MC33269	5V Voltage Regulator	DC
National Semiconductor/LP295	3.3V voltage regulator	DC
Analog Devices / AD6600	A/D Converter	19.6608 MHz(sampling)
M/A-COM /MLS9061-50598	Synthesizer	583 - 613 MHz
M/A-COM /MLS9132-50882	Synthesizer	869 - 894 MHz
National / LM2980	5V Regulator	DC
Motorola SPS/ X03D75810-960	Exciter BGA	810 - 960 MHz
RF Micro Devices/ RF2422	Quadrature Modulator	2.5 GHz
M/A-Com/ AM50-0003	Low Noise Amplifier	800 - 1000 MHz
Burr-Brown/ OPA2234U	Operational Amplifiers	-
Analog Devices/ AD603AR-R7	voltage-controlled amplifier	9-90 MHz

Input/Output Interface - IOI

Device Type #	Component Description	Operating Frequency
HCPL0720	Optocoupler	1Hz, 9600Hz
HCPL0661	Optocoupler	DC
G6K2FYDC3	Relay	1.544MHz/2.048MHz
MMBT3904	Transistor	DC
SI4412	Transistor	DC
MAX253	Xfmr Driver	350kHz
U6982C	Transformer	350kHz
TG911505N1	Transformer	1.544MHz/2.048MHz
U6982C	Transformer	350kHz



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MAX253	Xfmr Driver	350kHz
U6982C	5V to 24V 1 CT:2.1 CT Isolation Trnsfmr	350kHz
AC101TF	Ultra Low Pwr 10/100 Ethernet transceiver	10MHZ, 25MHZ
EX2001	Interface IC	10MHZ
MC74LCX00	Digital IC NAND Gate	25MHZ
ISPLSI2064V	Digital IC CPLD	25MHZ
MC74LCX244	Buffer/Driver	DC
DS90LV047A	3V LVDS QUAD CMOS DIFF LINE DRVR	0.5Hz, 2.048MHZ, 16.384MHZ
DS90LV048A	3V LVDS QUAD CMOS DIFF LINE DRVR	0.5Hz, 2.048MHZ, 16.384MHZ
DS92LV010A	Differential Line Transceiver	0.5Hz, 2.048MHZ, 16.384MHZ
LTC1686	RS-485 Prsn Dly Fail Safe XCVR	1Hz, 9600Hz

DC/DC Converter

Device Type #	Component Description	Operating Frequency
Lucent/ JC100C1	POWER MODULE 15V (100W)	500KHZ
Lucent/ JC050A1	POWER MODULE 5V (50W)	500KHZ
Lucent/ JC050F1	POWER MODULE 3.3V (50W)	500KHZ
Lucent/ FC250R1	POWER MODULE 28V (250W)	500KHZ
LM2941T flow LB04	Adj. Low Dropout VReg	DC
Power Trends/PT6653M	Integrated Switching Reg 5V 5A	550KHZ
Motorola/ MJD243T4	TRANSISTOR 100V 4A	DC
Analog Devices/TMP01	Temperature Sensor	DC
Motorola/MMBT3904LT1	NPN Transistor 40V	DC
Motorola/MMBT5550LT1	NPN Transistor 140V	DC

**Channel Elements Module - CEM**

Manufacturer#	Description	Operating Frequency
SY38157JZ02A	IC ASIC EMAXII-17X17	19.6608 MHz
SCM6341ZP12A	IC SRAM 128KX24	40 MHz max
MC74LCX02	IC NOR QUAD 2	40 MHz max
MC74LCX08	IC AND QUAD 2	40 MHz max
74LVCH32501A	IC REGISTER 36	40 MHz max
XC56311GC150	IC 24BIT DSP 1	40 MHz / 150 MHz
MIC5207-2.5BM5	REG MIC5207-1.	DC
	IC BFFR/CLK DR	19.6608 MHz

Integrated Linear Power Amplifier - ILPA

Device Type #	Component Description	Operating Frequency
MHL19338	Amplifier, LIN, 30 dB, 4W	1.93-1.99 GHz
MRF19045	RF Power MOSFET, 45W	1.93-1.99 GHz
MRF19030	RF Power MOSFET, 30W	1.93 - 1.99 GHz
MRF19125	RF Power MOSFET, 125W	1.93- 1.99 GHz
MMBT2222	Transistor, GEN PUR, NPN	Operates at DC
MC78L05ACD	Voltage Regulator, 5V, Low	Operates at DC
DS1620S	IC, Dig Thermostat, 5.5V, S0-8 Low & High Temp Sensor	Operates at DC
AD8361ARM	TruPwr Detector	100-2500 MHz



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Watkins-Johnson	MMIC, Amplifier, 12 dB,	0.250 - 3.0 GHz
AD8313ARM	IC, LOG AMP	0.1 - 2.5 GHz
MC33202D	IC, OP AMP, Rail-Rail, Dual;	Operates at DC
MMUN2232LT1	Transistor, NPN, INT Bias	Operates at DC