

Summary of Active Devices

APPLICANT: MOTOROLA

TRANSMITTER TYPE: IHET5BL1

Multicoupler Preselector Card (MPC6)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMPT3906LT1	Transistor PNP 40V 2A	D.C.
MMBT3904LT1	Transistor NPN 40V 2A	D.C.
MC33164D-5R2	IC Undervolt Sensing Ckt, Motorola	D.C.
MMSZ6685T	Zener Diode 3.9V 500mV, Motorola	D.C.
MMBD6050LT1	Diode 70V, 5A, Motorola	D.C.
HSMP-3800-L31	RF PIN Diode	1850-1910 MHz
PALCE22VIOH-15JC/4	IC Programmable Logic Device	D.C.
BRPG1204W-TR	Bicolor LED 70mA 2.5V	D.C.
BCW69	Transistor PNP	D.C.
CFK-0301	RF FET	1850-1910 MHz
MGA-82563	IC RF Amplifier	1850-1910 MHz
SNA-486	IC RF Amplifier	1850-1910 MHz
MMBZV6ALT1	Dual Diode Common Anode 5.6V	D.C.
MC33060ADR2	PWM Control Circuit	D.C.
MTD2955ET4	Power MOSFET Pch 60V, 12A	D.C.
MBRD340T4	Rectifier Schottky, 3A, 40V	D.C.
MC33182DR2	Low Pwr Dual Op-Amp	D.C.
P6SMB12CAT3	12V Transient Suppressor	D.C.

Multicoupler Preselector Card (MPC6) (continued)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMBD7000	Zener Diode	D.C.
RELAY_G6S_2G_DC12	DPDT 12V Relay	D.C.
MBRS140T3	Schottky Rectifier40V 1A	D.C.
LT1054IS	IC Voltage Converter with Regulator	D.C.
LM317	Adj. Voltage Regulator 500mA	D.C.
X9241	IC CMOS Quad EEPOT	D.C.
MC3303DR2	IC Gen Purpose Quad Op-Amp	D.C.
X2502D	IC EPROM 256x8	D.C.

Group Line Interface II (GLI2)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MB3240T10TBDG60	DRAM 4Mx32 DIMM	40 MHz
VSA51015	32.768MHz PLL-VCXO	32.768 MHz
SG-636PCE	40MHz OSC	40 MHz
MAX732CWE	FLASH PWR SUPPLY	170 kHz
I74F776A	FUTURE BUS RX	2.048 MHz
I74F777A	FUTURE BUS TX	2.048 MHz
LTC1435CS	SWITCHER IC	230 kHz
MPC860MHzP40	MICROPROCESSOR	40MHz
MC10ELT21	PECL	3 MHz
MPC946FAR2	CLOCK DIST IC	40 MHz, 20 MHz
MC68160CFB	EEST	20 MHz
MC34058FTA	RS485 XCVR	4.096 MHz
MC74LCX16244DTR2	BUFFERS	2.048 MHz
SX05TR009ZQ01	PPC ASIC	40MHz
MT9082AP	TSI DIGITAL SWITCH	8.192 MHz
PEB2254H-V13	E1/T1 FRAMER/LIU/HDLC	8.192, 12.352 MHz, 16.384 MHz
OR2C26A-3PS208-DB	LUCENT FPGA	8.192, 16.384 MHz 20 MHz
W42C70-01G	ZERO DELAY BUFFER	16 MHz
MAX250ESD	RS232 XCVR	9600 - 19.2K BPS
MAX251ESD	9600 - 19.2K BPS	RS232 XCVR

Broadband Transceiver/Digital Baseband Processor

800MHz BBX 1X

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequency</u>
LVCO3992U	oscillator	585 - 611MHz
LVCO3992U	oscillator	824 - 849MHz
SG615HC	oscillator	50MHz
BFP420	NPN transistor	238.4 MHz
BRPG1204W	Red/Green LED	0-2 Hz
MMBT3904LT1	NPN transistor	D.C.
MMDF2P02HD	P-channel mos FET	D.C.
MTB75N05HD	NPN transistor	D.C.
MMBT3904LT1	PNP transistor	D.C.
MMBT3906LT1	PNP transistor	D.C.
MBT3906DW1T1	NPN transistor	D.C.
MBT3904DW1T1	NPN transistor	D.C.
MMBT3904WT1	diode	19.6608 MHz
MBT3946DW1T1	dual PNP/NPN transistor	D.C.
MMBD301LT1	diode	D.C.
MMBZ5240BLT1	zener diode	D.C.
MMSZ5237BT1	zener diode	D.C.
MMSZ5243BT1	zener diode	D.C.
MBRD340T4	diode	D.C.

Broadband Transceiver/Digital Baseband Processor

800MHz BBX 1X

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequency</u>
MBR0530T1	Schottky Power Rectifier Diode	D.C.
MMBD7000LT1	Dual Switching Diode	D.C. & D.C.
MMBD914LT1	High-Speed Switching Diode	D.C.
HSM633	20 MHz Crystal Oscillator	20 MHz
HSMS-2825-L31	RF Schottky Barrier Diodes	6 MHz
BFG-541	Wideband Transistor	800 MHz
HSMS282k	RF Schottky Barrier Diodes	625 kHz & 800 MHz
MA4P274-1068	Dual PIN Diodes	800 MHz
AD826AR	opamp	D.C.
AD680	2.5 V Bandgap Reference	D.C.
max148beap	Analog to Digital Converter	694.4 kHz
LM2991S	Negative Low Dropout Adjustable Regulator	D.C.
MSM13R2850	DBP ASIC	0.5 Hz, 625 kHz, 19.6608 MHz, & 39.3216 MHz
74FCT162500ATPV	18-Bit Transceiver	19.6608 MHz & 39.3216 MHz
LTC1421IG	Hot Swap Controller	D.C.
MC68EN360ZP25VL	QUICC Processor	20 MHz
MC74HC4066DR2	Analog Mux	3 MHz
MC74VHCT244A	Dual Tri-state Buffer	625 kHz

Broadband Transceiver/Digital Baseband Processor

800MHz BBX 1X

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequency</u>
MC74ACT125DR2	Quad Tri-state Buffer	0.5 Hz, 2 Hz, 3 MHz, 19.6608 MHz, and 39.3216 MHz
MC10H641	PDECL-TTL 1:9 Clk Drvr	19.6608 MHz
MC10EL16DR2	PDECL Receiver	19.6608 MHz
MC100ELT23DR2	PDECL to TTL Translator	19.6608 MHz
MC10ELT21	PECL to TTL Converter	3 MHz & 19.6608 MHz
MC10EL11DR2	5V ECL 1:2 Differential Fanout Driver	19.6608 MHz
MC100EL58DR2	2:1 Multiplexer	19.6608 MHz
MC33063ADR2	DC to DC Converter	45 kHz
MC33161D	Univ Voltage Ref	D.C.
LM2903DR2	Dual Comparators	D.C.
MC74LCX02	Quad 2-Input NOR	20 MHz
MC74LCX08DTR2	Quad 2-Input AND	20 MHz
MC74LCX32DTR2	Quad 2-Input OR	20 MHz
MC74LCX244DTR2	Dual Tri-state Buffer	100 Hz, 9.6 kHz, 625 kHz, 1 MHz, 4.096 MHz,
MC74LCX125DTR2	Quad Tri-state Buffer	17 Hz & 625 kHz
MC74LCX574DTR2	Octal D-type Flip-Flop	19.6608 MHz
MC74LCX374	Octal D-type Flip-Flop	39.3216 MHz
DS1819AR-20	Reset/Watchdog Timer	2 Hz
AD6600	Analog to Digital Converter	19.6608 MHz & 39.3216

Broadband Transceiver/Digital Baseband Processor

800MHz BBX 1X

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequency</u>
TMP01ES	Programmable Temperature Controller	D.C.
AD603AR	opamp	0 - 1.2289 MHz
TLC5620ID	DAC Quad 8-Bit	625.0 KHz - 5.0 MHz
74ACT16244	Buffer/ Driver	D.C.
LT1081IS	RS-232 Transceiver	9.6 KHz
AT65-0413	Attenuator Digital	238.4 MHz
AD9767	14 Bit Dual Transmitt DAC	10.0 MHz
AD8402AR1	Power	625.0 KHz - 5.0 MHz
OPA2227	opamp	D.C.
RF2126	High Power Linear Amp	1800 - 2500 MHz
rf2484	Direct Quad. Modulator	800 - 2500 MHz
LP3965EMPX-ADJ	Voltage Regulator	D.C.
RF2172	Amp	585 -610 MHz
ispLSI2032VE-180LT44I	Lattice CPLD	0.5 Hz, 3 MHz, 19.6088 MHz, and 50 MHz
RC28F320C3BA110	Flash Memory	20 MHz
KM416V1204CT	DRAM	20 MHz
XCS40XL-4BG256I	Xilinc FPGA	.5 Hz, 10 MHz, 20 MHz, 19.6608 MHz, 39.3216 MHz
CY7B991-5JI	Prg. Skew Clk Buffer	19.6608 MHz

Broadband Transceiver/Digital Baseband Processor

800MHz BBX 1X

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequency</u>
ADF4118BRU	Oscillator	3.0 GHz
LM2991S	Voltage Regulator	D.C.
TPS71H01Q	Voltage Regulator	D.C.
XCV800-5BG560I0703	Xilinx FPGA	0.5 Hz, 0.625 - 5 MHz, 19.6608 MHz, 39.3216 MHz

Broadband Transceiver/Digital Baseband Processor

800MHz BBX2-DBP STLF4014DD

Digital Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
XC5210	Xilinx FPGA	20 MHz 19.6608 MHz 1 MHz
74LCX574	Octal FlipFlop	19.6608 MHz
BRPG1204W-TR	Red/Green LED	0 - 2 Hz
MMBT3904LT1	NPN Transistor	DC 0 - 2 Hz
74ACT02	Quad 2In NOR	20 MHz
AD9762	12Bit DAC	4.9152 MHz
AD826AR	Dual Op Amp	0 - 630 KHz
MC79M05BDTRK	5V Linear Regulator	DC
MC33269DT_3.3	3.3V Linear Regulator	DC
MC33161	Univ Voltage Ref	DC
MMSZ5237BT1	8.2V Zener Diode	DC
MC33063AD	DC to DC Converter	45 KHz
MMDF2P02HDR2	Dual P-channel FET	45 KHz
MBRS340T3	3.0A Schottky Diode	45 KHz
MC10ELT21D	PECL to TTL Converter	3 MHz

**800MHz BBX2-DBP STLF4014DD
(continued)**

Digital Module cont.

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MC10H641	Octal ECL to TTL Clk Distributor	19.6608 MHz
MC10EL16D	ECL Buffer	19.6608 MHz
MC10EL58	PECL Buffer	19.6608 Mhz
MC100ELT23	PECL to TTL	19.6608 Mhz
74ABT125D	BiCMOS Hex Tri-state Buffer	DC
		4.096 MHz
ISPLSI2032	Lattice CPLD	0.5 Hz
		3 MHz
		19.6608 MHz
		50 MHz
SG615HC-50.0000MHz	50Mhz Crystal Oscillator	50 MHz
74HC4066	Analog Mux	3 MHz
74ACT08	Quad 2In And	DC
		0.5 Hz
		20 MHz
74LCX244	Octal Tri-State Buffer	4.096 MHz
		100Hz
MBR0530T1	0.5A Schottky Diode	100Hz

**800MHz BBX2-DBP STLF4014DD
(continued)**

Digital Module cont.

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MC68EN360ZP	QUICC	20 MHz
DS1232S	Reset/Watchdog	2 Hz
HSM636	20MHz Crystal Oscillator	20 Mhz
28F800CV	FLASH	20 MHz
MCM518160	DRAM	20 Mhz
74ACT16244	16bit Tri-state Buffer	20Mhz
74ACT245	8bit Transceiver	20MHz
SX02RH029DH01	DTC ASIC	0.5 Hz
		19.6608 MHz
		20 MHz
IDT74FCT162500ATPV18Bit Transceiver		19.6608 MHz
MMBD7000LT1	Dual Diode	DC
		9.6 KHz
		0 - 630 KHz
LT1081IS	RS-232 Transceiver	9.6 KHz
MMSZ5243BT1	Dual 13V Zener Diode	DC

800MHz BBX2-DBP STL4014DD (continued)

RF Control Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMBD201LT1	30V Hot Carrier Diode	DC
AD680AR	2.5VDC Reference	DC
TLC5620	Serial Quad DAC	DC
MC145041	11in Serial ADC	0 - 630 KHz 1 Mhz

RXBB Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
AD6600	11Bit ADC	238.4MHz 19.6608Mhz 39.3216MHz
MSM13R2850	DBP ASIC	19.6608Mhz 39.3216MHz
MC10ELT20	PECL Transceiver	19.6608Mhz
MC33269DT	3.3V Linear Regulator	DC
74ABT125D	BiCMOS Hex Tri-state Buffer	39.3216MHz
MIC2920A-5.0BS	5V Linear Regulator	DC

800MHz BBX2-DBP STLF4014DD (continued)

RF Reverse Link Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
SMD-KA27	RF-to-IF Mixer	824-869 MHz 238.4 MHz
MMBT3904LT1	NPN Transistor	DC
MRF5812	NPN BJT	824-869 MHz
MMBT3906LT1	PNP Transistor	DC
MRF9411	NPN Transistor	238.4 MHz
AD210	Programmable Attenuator	238.4 MHz
SWD-119	MA/COM Switch	DC

TX Synthesizer Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMBT3904LT1	NPN Transistor	DC
MMBT3904LT1	NPN Transistor	3MHz
MMBT3906LT1	NPN Transistor	DC
MRF9411LT1	NPN Transistor	869-894MHz
LM2931	5V Adj. Low Dropout Regulator	DC
MLS9109-00881	MA/COM Synthesizer module	869-894MHz

800MHz BBX2-DBP STLF4014DD (continued)

RX Synthesizer Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMBT3904LT1	NPN Transistor	3MHz
MMBT3904LT1	NPN Transistor	DC
MRF9411LT1	NPN Transistor	583-613MHz
LM2931	5V Adj. Low Dropout Regulator	DC
MC79M058	-5V Regulator	DC
MC33269	5V Adj. Regulator	DC
MMBZ5231BLT1	5.1V Zener Diode	DC
MMBD7000LT1	Diode	DC
SI9400DY	P-channel MOSFET	DC
MLS9038-00598	MA/COM Synthesizer module	583-613MHz
MRF0904	Amplifier IC	583-613MHz

RF Forward Link Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMBT3906LT1	PNP Transistor	DC
MMBZ5235BLT1	6.8V Zener Diode	DC
MBR0530T1	0.5A Schottky Diode	DC
LM2937IMP-5.0	5 Volt Regulator	DC
MMBT3904LT1	NPN Transistor	0-630KHz

800MHz BBX2-DBP STL4014DD
(continued)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
X9312	Digital EEPROM	1 MHz
RF2422	Modulator	869-894MHz
LDC33B030GC0900A	Quadrature Coupler	869-894MHz
HSMP3800	Single Package Diode	DC
MRF5812	RF Transistor	869-894MHz
MC33269	Adjustable Low-Dropout Reg.	DC
Si9400DY	FET	DC
MMBZ5231BLT1	5.1V Zener Diode	DC
MMBD7000	Dual 100V Diode	DC
MMBT3904LT1	NPN Transistor	DC
MRFIC0904	900MHz Amp	869-894MHz
LDC33B100J0900A	Directional Coupler	869-894MHz
MC33182	Op Amp	0-630KHz
AD603	Op Amp	0-630KHz
HSMS-2825	Detector Diode	0-630KHz, DC
HSMS-2825	Detector Diode	869-894MHz, DC

800MHz BBX2-DBP STLF4014DD
(continued)

RF Forward Link Module

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
OPA2234U	Op Amp	DC
MC79M05BDTRK	5V Negative Regualtor	DC
DS1620	Temperature Sensor	DC-1.75MHz

MCC 1X - Multi Channel CDMA Card

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
108612961	5V to 3.3V Switching Regulator	~1MHz
108612953	5V to 2.5V Switching Regulator	~1MHz
MMBT3904LT1	NPN Trans 40V .2A	DC
SG8002JA-66.0MPCBL3	XTAL OSC	66 MHz
SG8002JC-50.0MPCBL2	XTAL OSC	50 MHz
SM1145CV-25.0MHz	Non-PLL XTAL OSC	25 MHz
SN74LVT125DBR	3.3V ABT Quad Buffers, 3ST Outputs	DC
MC74LCX240DTR2	Low-Voltage CMOS Octal Buffer	25 MHz
MPC8260ZU200AR2	PowerQUICC II™ Integrated Comm. Processor	200 MHz
MC74HC32AD	OR Quad 2 Input	DC
MC74ACT14D	Hex Schmitt Trig	DC
MC74ACT541	Oct 3ST Line DRVR/CVR	DC
MC74ACT574DW	Oct D Flip/Flop	DC
MC10H641FN	PDECL-TTL 1:9 Clock Driver	19.6608 MHz
MC10EL16D	PDECL Receiver	19.6608 MHz
MC10EL58D	PDECL 2:1 Mux	19.6608 MHz
MC100ELT23	PDECL to TTL Translator	19.6608 MHz
MPC946FAR2	Low Voltage 1:10 CMOS Clock Driver	66MHz, 50MHz
LM317D	Positive Voltage Regulator	DC
MC74LCX00DTR2	Low-Voltage CMOS Quad 2-Input NAND Gate	DC
MC74LCX02DTR2	Low-Voltage CMOS Quad 2-Input NOR Gate	DC

MCC 1X - Multi Channel CDMA Card

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<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MC74LCX74DTR2	Low-Voltage CMOS Dual D-Type Flip-Flop	DC
MC74LCX244DTR2	Low Voltage CMOS Octal Buffer	DC
MC74LCX16244DT	Low-Voltage 16-Bit Buffer	33 MHz, 25 MHz, 4 MHz, 16MHz
DS1706TESA	Reset Controller	DC
EPM7256AEFC256-7	256 Logic Cell CPLD	66 MHz
74ABT125D	Quad Buffer, 3ST Outputs	DC
SN74CBTD3384DBR	10-Bit FET Bus Switches, Level Shifting	19.6608 MHz, 39.3216 MHz
CSM5000	Cell Site Modem ASIC	50MHz
MT48LC8M16A2TG-75	SDRAM Memory 2M x 16	66MHz, 50 MHz
EPM7064BTC44-3	64 Logic Cell CPLD	39.3216 MHz
MAX6301CSA	Low-Power uP Supervisory Circuit	DC
XC2S100-5FG256C	100K Gate FPGA	66 MHz, 19.6608 MHz, 39.3216 MHz
XC2S200-5FG256C	200K Gate FPGA	66 MHz, 4 MHz, 8 MHz, 16MHz
E28F128J3A-150	16 Mbyte FLASH Memory	~8 MHz, ~6 MHz
MAX3233ECWP	3.3V Dual RS232 Transceiver	19.2 kHz
AL100A-A4	8 Port 10/100 Ethernet Switch	66 MHz, 25 MHz
CY7B991V-2JC	Programmable Skew Clock Buffer	4 MHz, 8 MHz, 16 MHz
X24C04S8-2.7	Serial 256x8 2-wire EEPROM	DC

MCC 1X - Multi Channel CDMA Card

(CONTINUED)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
X25020S-2.7	Serial 256x8 EEPROM	DC
M4A3-128/64-55VC	128 Macrocell CPLD	50 MHz
74LCXR162245MTDX	16 Bit Bi-directional Transceiver	33 MHz
LXT971ALC	Ethernet Transceiver, Dual Speed	25 MHz
GAL26CV12C-7LJ	PAL	19.6608 MHz

Multiple Channel CDMA (MCC-24E) Card: Issue O

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
SG636PH-50MHz	XTAL OSC	X2 50 MHz
SG636PFT-20MHz	XTAL OSC	X1, X3 20 MHz
MTD20N03NDLT4	N Ch FET 30V, 20A	Q1, Q2 ~275 kHz
MMBT3904LT1	NPN Trans 40V .2A	Q3, Q4 DC
MBRS140T3	Schottky Diode 1A, 40V	D1, D2 ~275 KHz
SY38157JU02	EMAXX-II ASIC	U100,101,200,201 19.6608 MHz U300,301,400,401 19.6608 MHz U500,501,600,601 19.6608 MHz
LTC1435CS	Switching Regulator	U38 ~275 kHz
XC5204-6FQ160C	4K Gate FPGA	U64 19.6608 MHz
XC5215-6FQ160C	15K Gate FPGA	U67 4.096 MHz
XC9572-7PQ100C	1.6K Gate ISP EPLD	U8,U16 ~8 MHz
XC9572-10PQ100C	1.6K Gate ISP EPLD	U50,U51 ~22 MHz
DS1705ESA	Reset Controller	U3,U21,U44-U49 DC
74LCX16500MEAX	18Bit Trans Latch	U53,U54,U58,U59 19.6608 MHz
74LCX16501MEAX	18Bit Trans Latch	U63,U65,U68,U90 19.6608 MHz
MC68EN360ZP25	Comm uP with Ethernet 25 MHz	U27
DSP56167FV60	Digital Signal Processor	U104,U204,U304 44 MHz U404,U504,U604 44 MHz
74ACT00D	NAND Quad 2 Input	U10 DC
74ACT02D	NOR Quad 2 Input	U17 DC
74ACT08D	AND Quad 2 Input	U2,U39,U40,U41 DC
74ACT14D	Hex Schmitt Trig	U20,U22 DC
74ACT32D	OR Quad 2 Input	U56 DC
74ACT74D	Dual FF	U1,U35,U36,U37 DC
74ACT574DW	Oct D Flip/Flop	U52 DC
74ACT541DW	Oct 3ST Line DRVR/CVR	U57 DC
74ACT05D	Hex Inverter w/Opn DRN	U13 DC

Multiple Channel CDMA (MCC-24E) Card: Issue O (continued)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MC10H641FN	PDECL-TTL 1:9 Clk Drvr	U60 19.6608 MHz
MC10EL16D	PDECL Receiver	U81,U83 19.6608 MHz
MC10EL58D	PDECL 2:1 Mux.	U82 19.6608 MHz
MC100ELT23D	PDECL to TTL Translator	U80 19.6608 MHz
MC88913D	Clk Driver	U26 50, 25 MHz
		U55 20, 10 MHz
74LCX244DT	Oct Line Driver	U66,U78,U88 4.096 MHz
74LCX86DT	QUAD EOR 2 Input	U69-77, U84-87
MCM6226BJ15	SRAM 128Kx8	U102,103,202,203 22 MHz
		U302,303,402,403 22 MHz
		U502,503,602,603 22 MHz
MCM518165BT60	DRAM EDO 16Mx16	U5,U12 ~8 MHz
74ABT125D	Quad Buffer	U31,61,62,79 DC
74FCT162501ATPV	18Bit Transceiver	U25,U30 ~1.4 MHz
		U28,29,32,33,34,43 DC
74FCT162827BTPV	20Bit Buffer	U23,U24 ~1.4 MHz
LXT907 APC	Ethernet Interface	U19 20.0 MHz
LT1081IS	RS232 XMTR RCVR	U9 ~9.6 kHz
X25020	Serial 256x8 EEPROM	U18 DC
GAL26CV12C-7LJ	PAL	U89 19.6608 MHz
E28F008SC85	FLASH 1MX8	U6,U7,U14 ~1.4 MHz

CDMA Clock Distribution (CCD) Module: Issue A or B

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
GAL22V10C-7LJ	PAL	U2 50 MHz
2520N-50MHz	XTAL OSC	X1 50 MHz
MMBT3904	NPN Transistor	Q1 DC
74ACT04D	Hex Inverter	U1 DC
MC10EL16D	PDECL Receiver	U5,U8,U9 DC
		U16 19.6608 MHz
MC10EL111FN	PDECL 1:9 Clk Driver	U13,U14,U15 19.6608 MHz
MC10EL23D	PDECL to TTL Translator	U6,U7,U10,U11 DC
		U12 19.6608 MHz
DS1232S	Micro Power Monitor	U4 DC
X25020	Serial 256x8 EEPROM	U3 DC

Clock Synchronization Module (CSM2)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MJD243RL	Q13, Q11, Q10, Q9, Q8, Q1	3 MHz
MJD2955T4	Q15	D.C.
MMFT3055V	Q17, Q18	307.2 KHz
MMBT3904	Q19, Q14, Q12, Q7, Q5, Q4, Q2	D.C.
MMBT3906	Q6, Q3	D.C.
MMBT3906	Q16	307.2 KHz
74ACT14D	U1	0.5 Hz
74ACT14D	U75, U66, U65, U37	1 Hz
MC14538B	U10	D.C.
IDT71024S15TY	U82, U81, U12, U11	16 MHz
74ACT00D	U13	19.6608 MHz
74ACT00D	U60	D.C.
AM29F040	U15, U14	16 MHz
AD817AR	U16	19.6608 MHz, 3 MHz
74ACT245DW	U19, U17	1 Hz
AD9850	U18	19.6608 MHz
MC68302FC	U2	16 MHz
XC5206-160	U20	307.2 KHz, 19.6608 MHz, 10 MHz
AD7846JP	U24	1 Hz
MC10ELT21D	U25	10 MHz
MC78M12	U26, U53	D.C.
MC10E1651FN	U27	19.6608 MHz
LM317D	U28	D.C.
MC78M15CDTRK	U29	D.C.
LT1081IS	U3	130 KHz
MC79M15CDT	U30	D.C.
MC100ELT23D	U31	19.6608 MHz
MC100ELT23D	U73, U72	D.C.

Clock Synchronization Module (CSM2)

(continued)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MC100ELT23D	U36, U35	19.6608 MHz
MC100ELT23D	U78, U77	3 MHz
LT1054IS	U32	25 kHz
MC10EL16D	U33	19.6608 MHz
GAL22V10B-7LJ	U34	50 MHz
74ACT74D	U38	9.8304 MHz
X25020	U4	D.C.
78ST305HC	U40	1 MHz
10H20EV8	U41	50 MHz
MC10EL07D	U49, U43	19.6608 MHz
MC10EL51D	U52, U50, U45, U44	D.C.
MC10EL51D	U55	0.5 Hz
MC10EL31D	U56, U51, U46	D.C.
75175D	U74, U59	8000 Hz
75175D	U76, U47	4800 Hz
75175D	U79	9600 Hz
MC10EL04D	U57, U48	D.C.
74ACT05D	U5	D.C.
75172BDW	U67, U54	4800 Hz
75172BDW	U71	0.5 Hz
MC10EL16D	U62, U61, U58	D.C.
MC10EL16D	U63	19.6608 MHz
MC10EL16D	U64	D.C.
DS1232S	U6	D.C.
MC10EL111FN	U68	0.5 Hz
MC10EL111FN	U69	D.C.
MC10EL111FN	U70	19.6608 MHz

Clock Synchronization Module (CSM2)

(continued)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MC68681FN	U7	4 MHz, 9600 Hz
74ACT32D	U8	16 MHz
MC34025	U83	307.2 MHz
78M05	U84	D.C.
74ACT04D	U9	16 MHz
MA505-16MHz	Y1	16.0 MHz
19.6608 MHz VCXO	Y2	19.6608 MHz
SG615H-50MHz	Y3	50 MHz

Switchboard 1900 MHz (STLG4009A)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
MMBZ5231BL	5.1V Zener Voltage Regulator Diode	DC
MMBT3904	NPN Transist	DC
MC33161	Universal Voltage Monitor	DC
MC33063	Switching Regulator	40 kHz
MMDF2P02HD	P-Channel MOSFET	40 kHz
MBRS340T3	Schottky Power Rectifier (1A)	40 kHz
MIC2920A-5.0BS	Low-Dropout Voltage Regulator (0.4A)	DC
MIC2940A	Low-Dropout Voltage Regulator (1.25A)	DC
MIC5205-3.3BM5	Low-Dropout Voltage Regulator (150mA)	DC
MIC2941ABU	Low-Dropout Variable Voltage Regulator (200mA)	DC
MBR0530T1	Schottky Power Rectifier (0.5A)	DC
74LCX244	Low-Voltage CMOS Octal Buffer	DC
MMBD7000	Dual Switching Diode	DC
pLSI2032	Programmable Logic Device	DC
25020	Serial E ² PROM	100 kHz
74ACT04	Hex Inverter	DC
74ACT00	Hex NAND Gate	DC
BRPG1204	Red-Green LED	DC
LM2901	Quad Comparator	DC
HMC182S14	GaAs SP4T Terminated Switch	1800 - 2000 MHz
SW338	GaAs SPDT Terminated Switch	1800 - 2000 MHz
HMC183QS24	GaAs SP8T Terminated Switch	1800 - 2000 MHz
SW419	GaAs SP4T Terminated Switch	1800 - 2000 MHz
SNA-486	GaAs FET MMIC (100mA) RF Amplifier	1900 - 2000 MHz

High Stability Oscillator (HSO)

<u>Device Type</u>	<u>Component Description</u>	<u>Operating Frequencies</u>
SN74AC240DW	LINE DRIVER	1 HZ
X2502OS	EEPROM	9.6 kHz
DS3695AM	RS485 DRIVER	1 HZ
FE5680A	Rb MODULE	500 HZ 8.388608 MHz 38 MHz 50.255 MHz 100.51 MHz 6.8 GHZ