

28/02/2006

Voltages, Currents and Power @ RHU1000 / RHU2000

DL Path

Narrow Band (High)

Component	QTY	Voltage	Current Typ. [mA]	Current Max. [mA]
HMC273MS10G	1	3.3V_DL	---	0.1
AGB-3303	1	7.5V_DL	80	90
RMBA19500A-58	2	7V_PA_Hi	650	1000

Narrow Band (Low)

Component	QTY	Voltage	Current Typ. [mA]	Current Max. [mA]
HMC273MS10G	1	3.3V_DL	---	0.1
AGB-3302	1	7.5V_DL	65	70
RMBA09501A-58	1	7V_PA_Low	550	1000

Broad Band

Component	QTY	Voltage	Current Typ. [mA]	Current Max. [mA]
ERA-2SM	1	7.5V_DL	40	75
AGB-3302	1	7.5V_DL	65	70
AGB-3303	1	7.5V_DL	80	90
LFD80PhotoDiode	1	7.5V_DL	---	10
LM2904M	2	3.3V_DL	40	100 (1660mW)
AD8361ARM	2	3.3V_DL	2.2	4 (400mW)
Digital Buffers	2	3.3V_DL	2	4
CC1000 (FSK)	1	3.3V_DL	10	15

Voltages Currents and Power

Voltage	I [A] Typ.	I [A] Max.	PWR [W] Typ.	PWR [W] Max.
3.3V_DL	0.055	0.1	0.18	0.33
7.5V_DL	0.35	0.45	2.6	3.4
7V_PA_Low	0.55	1	3.9	7
7V_PA_Hi	0.65	1	4.6	7

UL Path

Narrow Band (High)

Component	QTY	Voltage [V]	Current Typ. [mA]	Current Max. [mA]
HMC273MS10G	1	3.3V_UL	---	0.1
AGB-3303	1	7.5V_UL	80	90
SGA-4586	1	7.5V_UL	45	90

Narrow Band (Low)

Component	QTY	Voltage [V]	Current Typ. [mA]	Current Max. [mA]
HMC273MS10G	1	3.3V_UL	---	0.1
HMC288MS8	1	3.3V_UL	---	0.1
AGB-3303	1	7.5V_UL	80	90
SGA-4586	1	7.5V_UL	45	90

Broad Band

Component	QTY	Voltage [V]	Current Typ. [mA]	Current Max. [mA]
AGB-3303	1	7.5V_UL	80	90
LM2904M	2	3.3V_UL	40	100 (1660mW)
LM2904M	2	-5V	40	100 (1660mW)
AD8361ARM	3	3.3V_UL	3.3	6 (600mW)
Laser Diode	1	-5V	30	60
Digital Buffers	3	3.3V_UL	3	6
CC1000 (FSK)	1	3.3V_UL	10	15
SV-1007 (VCO)	1	3.3V_UL	7	10

Digital section

Component	QTY	Voltage [V]	Current Typ. [A]	Current Max. [A]
Digital Section	1	3.3V_D	0.5	1

Voltages Currents and Power

Voltage	I [A] Typ.	I [A] Max.	PWR [W] Typ.	PWR [W] Max.
3.3V_UL	0.05	0.12	0.2	0.4
7.5V_UL	0.35	0.7	2.6	5.25
-5V	0.07	0.15	0.35	0.8
+3.3V_D	0.5	1	1.7	3.3

Power from System Voltage Regulators

Module	Voltage Supply	Device Max. Current Output	Device Typ. Current Output	Total Pwr Typ
MIC2920A-3.3BS	3.3V_DL	0.4A	100mA	0.33W
MIC2920A-3.3BS	3.3V_UL	0.4A	100mA	0.33W
MIC2941ABU	7.5V_UL	1.25A	350mA	2.625W
MIC2941ABU	7.5V_DL	1.25A	350mA	2.625W
MIC29302BU	7V_PA_High	3A	650mA	4.55W
MIC29302BU	7V_PA_Low	3A	550mA	3.85W
MIC29301-3.3BU	3.3V_D	3A	500mA	1.65W
NJM79L05UA-ND	-5V	1A	100mA	0.5W
Total	-----	-----	-----	16.46W

Voltage Regulators Power Dissipation

Module	Voltage Supply	Device Typ. Current Output	Total Pwr Typ
MIC2920A-3.3BS	3.3V_UL	100mA	0.47W
MIC2920A-3.3BS	3.3V_DL	100mA	0.47W
MIC2941ABU	7.5V_UL	350mA	0.175W
MIC2941ABU	7.5V_DL	350mA	0.175W
MIC29302BU	7V_PA_High	650mA	0.65W
MIC29302BU	7V_PA_Low	550mA	0.55W
MIC29301-3.3BU	3.3V_D	500mA	2.35W
NJM79L05UA-ND	-5V	100mA	0.2W
Total	-----	-----	5.04W

Total System Power: 16.46 + 5.04 = **21.5W**