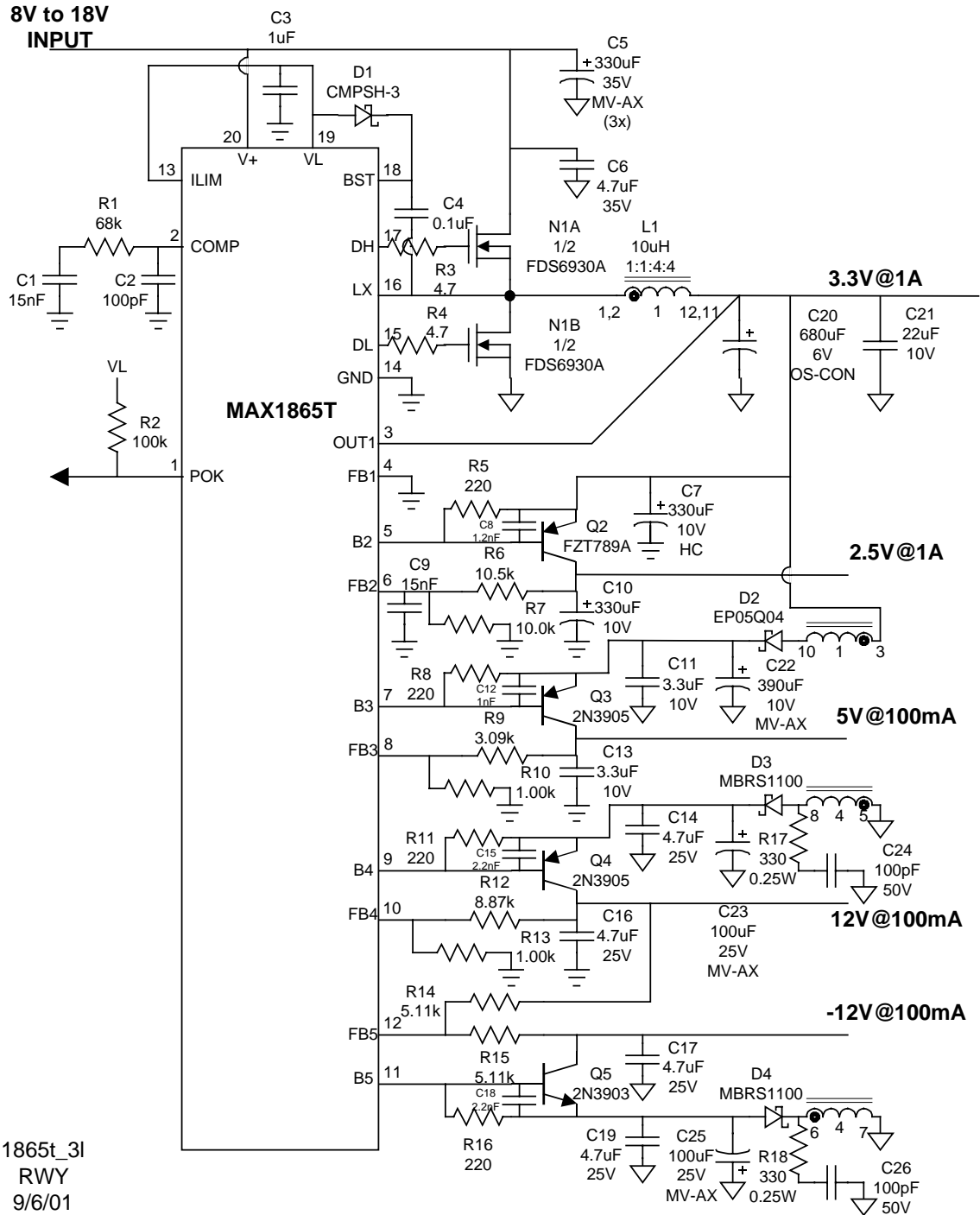


ADSL Modem



Vin	Iin	Vout	Iout	V2	I2	V3	I3	V4	I4	V5	I5	Eff.
8.036	1.462	3.322	1.005	2.530	1.002	5.053	0.100	12.17	0.101	-12.07	-0.102	0.752
12.00	1.011	3.321	1.005	2.530	1.002	5.052	0.100	12.17	0.101	-12.17	-0.102	0.729
15.00	0.845	3.321	1.005	2.530	1.002	5.052	0.100	12.18	0.101	-12.17	-0.102	0.698
18.00	0.739	3.320	1.005	2.530	1.002	5.053	0.100	12.18	0.101	-12.18	-0.102	0.665
21.00	0.667	3.320	1.005	2.530	1.002	5.055	0.100	12.18	0.101	-12.18	-0.102	0.632

Transformer Design

EFD15 core $AL=84nH/T^2$ (Coiltronics SG3-0084)

Layer 1: (Pin 3-10) 11 turns bifilar #28AWG
 Layer 2: (Pin 5-8) 44 turns #34AWG
 Layer 3: (Pin 1-12) 11 turns bifilar #28AWG
 Layer 4: (Pin 6-7) 44 turns #34AWG
 Layer 5: (Pin 2-11) 11 turns bifilar #28AWG

BILL OF MATERIALS

8V to 18V Input

3.3V @ 1A, 2.5V @ 1A, 5V @ 100mA, 12V @ 100mA, -12V @ 100mA Output

1865t_3l

9/6/01 RWY

DESIGNATION	QTY	DESCRIPTION
C1,C9	2	15nF ceramic capacitor (0805)
C2	1	100pF ceramic capacitor (0805)
C3	1	1uF 10V ceramic capacitor (0805) Taiyo Yuden LMK212BJ105MG
C4	1	0.1uF ceramic capacitor (0805)
C5	3	330uF 35V aluminum electrolytic capacitor Sanyo 35MV330AX
C6	1	4.7uF 35V Y5V ceramic capacitor (1206) Taiyo Yuden GMK316F475MG
C7,C10	2	330uF 10V aluminum electrolytic capacitor Sanyo 10MV330HC
C8	1	1.2nF ceramic capacitor (0805)
C11,C13	2	3.3uF 10V ceramic capacitor (1206) Taiyo Yuden LMK316BJ335ML
C12	1	1nF ceramic capacitor (0805)
C14,C16,C17,C19	4	4.7uF 25V ceramic capacitor (1210) Taiyo Yuden TMK325BJ475MN
C15,C18	2	2.2nF ceramic capacitor (0805)
C20	1	680uF 6V organic semiconductor capacitor Sanyo OS-CON 6SP680M
C21	1	22uF 10V ceramic capacitor (1812) Taiyo Yuden LMK432BJ226MM
C22	1	390uF 10V aluminum electrolytic capacitor Sanyo 10MV390AX
C23,C25	2	100uF 25Valuminum electrolytic capacitor Sanyo 25MV100AX
C24,C26	2	100pF 50V ceramic capacitor (0805)
D1	1	100mA Schottky diode Central Semi CMPSH-3
D2	1	0.5A 40V Schottky diode Nihon EC05Q04
D3,D4	2	1A 100V Schottky diode

On Semiconductor MBRS1100		
N1	1	55m Ohm 30V Dual MOSFET (8-SO) Fairchild Semi FDS6930A
Q2	1	2A, -25V PNP transistor (SOT-223) Zetex FZT789A
Q3,Q4	2	200mA, -40V PNP transistor (TO-92) 2N3905
Q5	1	200mA 40V NPN transistor (TO-92) 2N3903
R1	1	100k Ohm 5% resistor (0805)
R2	1	68k Ohm 5% resistor (0805)
R3,R4	2	4.7 Ohm 5% resistor (0805)
R5,R8,R11,R16	4	220 Ohm 5% resistor (0805)
R6	1	10.5k Ohm 1% resistor (0805)
R7,R14,R15	3	10.0k Ohm 1% resistor (0805)
R9	1	3.09k Ohm 1% resistor (0805)
R10,R13	2	1.00k Ohm 1% resistor (0805)
R12	1	8.87k Ohm 1% resistor (0805)
R17,R18	2	330 Ohm 5% 0.25W resistor (1210)
T1	1	1:1:4:4 Transformer Lpri=10uH (SG3) ICE Components ICA-????
U1	1	MAX1865TEEP (20-QSOP)