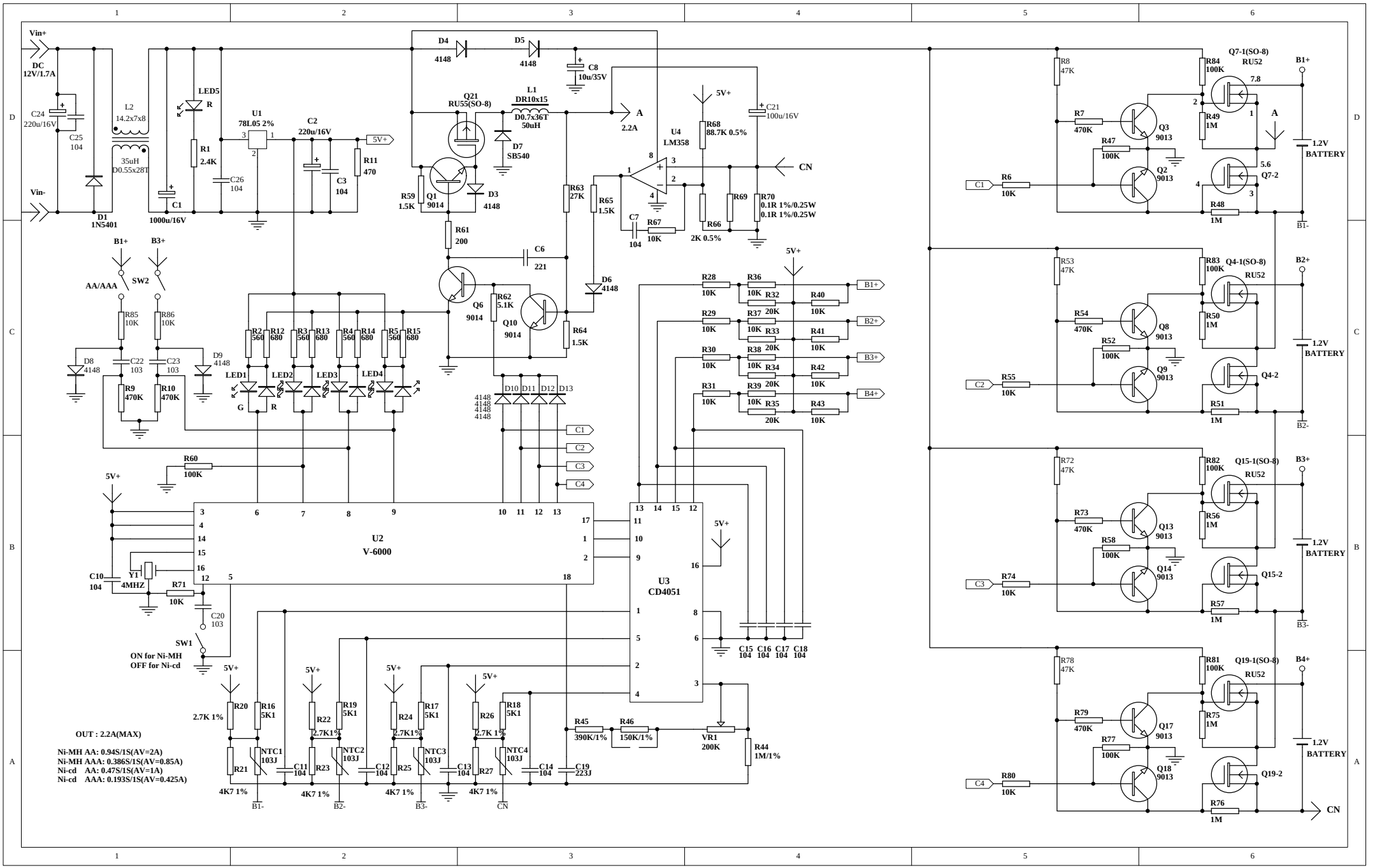
Vin+
DC
12V/1.7A
Vin-
C24
220u/16V
C25
104
L2
14.2x7x8
35uH
D0.55x28T
D1
1N5401
LED5
R
R1
2.4K
C1
1000u/16V
U1
78L05 2%
C2
220u/16V
C26
104
C3
104
R11
470
5V+
D4
4148
D5
4148
C8
10u/35V
Q21
RU55(SO-8)
L1
DR10x15
D0.7x36T
50uH
A
2.2A
D7
SB540
R59
1.5K
Q1
9014
D3
4148
R61
200
C6
221
Q6
9014
R62
5.1K
Q10
9014
D6
4148
R64
1.5K
R63
27K
R65
1.5K
U4
LM358
5V+
R68
88.7K 0.5%
C21
100u/16V
CN
C7
104
R67
10K
R66
2K 0.5%
R69
R70
0.1R 1%/0.25W
0.1R 1%/0.25W
B1+
B3+
AA/AAA
SW2
R85
10K
R86
10K
D8
4148
C22
103
C23
103
D9
4148
R9
470K
R10
470K
R2 560
R12 680
R3 560
R13 680
R4 560
R14 680
R5 560
R15 680
LED1
LED2
LED3
LED4
G
R
D10
D11
D12
D13
4148
4148
4148
4148
C1
C2
C3
C4
R60
100K
5V+
U2
V-6000
C10
104
Y1
4MHZ
R71
10K
C20
103
SW1
ON for Ni-MH
OFF for Ni-cd
U3
CD4051
C15
104
C16
104
C17
104
C18
104
R28
10K
R36
10K
R32
20K
R40
10K
R29
10K
R37
10K
R33
20K
R41
10K
R30
10K
R38
10K
R34
20K
R42
10K
R31
10K
R39
10K
R35
20K
R43
10K
B1+
B2+
B3+
B4+
OUT : 2.2A(MAX)
Ni-MH AA: 0.94S/1S(AV=2A)
Ni-MH AAA: 0.386S/1S(AV=0.85A)
Ni-cd AA: 0.47S/1S(AV=1A)
Ni-cd AAA: 0.193S/1S(AV=0.425A)
2.7K 1%
R20
R16
5K1
R21
4K7 1%
NTC1
103J
C11
104
B1-
R22
2.7K1%
R19
5K1
R23
4K7 1%
NTC2
103J
C12
104
B2-
R24
2.7K1%
R17
5K1
R25
4K7 1%
NTC3
103J
C13
104
B3-
R26
2.7K 1%
R18
5K1
R27
4K7 1%
NTC4
103J
C14
104
CN
C19
223J
R45
390K/1%
R46
150K/1%
VR1
200K
R44
1M/1%
R8
47K
R84
100K
Q7-1(SO-8)
RU52
7.8
R7
470K
Q3
9013
R49
1M
A
R47
100K
Q2
9013
5.6
Q7-2
C1
R6
10K
R48
1M
B1-
1.2V
BATTERY
R53
47K
R83
100K
Q4-1(SO-8)
RU52
B2+
R54
470K
Q8
9013
R50
1M
R52
100K
Q9
9013
Q4-2
C2
R55
10K
R51
1M
B2-
R72
47K
R82
100K
Q15-1(SO-8)
RU52
B3+
R73
470K
Q13
9013
R56
1M
R58
100K
Q14
9013
Q15-2
C3
R74
10K
R57
1M
B3-
R78
47K
R81
100K
Q19-1(SO-8)
RU52
B4+
R79
470K
Q17
9013
R75
1M
R77
100K
Q18
9013
Q19-2
C4
R80
10K
R76
1M
CN

General: This charger is use for charge rechargeable Nickel-Cadmium, Ni-MH batteries, size AAA and AA batteries. The complete unit is housed in the Polycarbonate resin enclosure in accordance with UL, C-UL, IEC and EN Safety Standard.

Description: Microprocessor Controlled Ultra-fast NiMH and NiCd Battery Charger

Rating: INPUT: 12VDC 1.7A
OUTPUT:
NiMH- AA-4 x (1.4V DC 2A)
NiMH- AAA-4 x (1.4V DC 0.85A)
NiCd- AA-4 x (1.4V DC 1A)
NiCd- AAA-4 x (1.4V DC 0.425A)

COMPONENTS:

		Type	Description
1.	R1	Resistor	2.4KΩ ±5% 1/4W
2.	R2, R3, R5	Resistor	560Ω ±5% 1/4W
3.	R4	Resistor	560Ω ±5% 1/8W
4.	R6, R28, R29, R30, R31, R67, R71, R74, R80, R86	Resistor	10KΩ ±5% 1/4W
5.	R7, R9, R10, R54, R73, R79	Resistor	470KΩ ±5% 1/4W
6.	R8, R53, R72, R78	Resistor	47KΩ ±5% 1/4W
7.	R11	Resistor	470Ω ±5% 1/4W
8.	R12, R13, R14, R15	Resistor	680Ω ±5% 1/4W
9.	R16, R17, R18, R19, R62	Resistor	5.1KΩ ±5% 1/4W
10.	R20, R22, R24, R26	Resistor	2.7KΩ ±1% 1/4W*
11.	R21, R23, R25, R27	Resistor	4.7KΩ ±1% 1/4W
12.	R32	Resistor	20KΩ ±1% 0805
13.	R33, R34, R35	Resistor	20KΩ ±1% 1/4W
14.	R36, R38, R39, R41, R42, R43	Resistor	10KΩ ±1% 1/4W
15.	R37, R40	Resistor	10KΩ ±1% 0805
16.	R44	Resistor	1MΩ ±1% 1/4W
17.	R45	Resistor	390KΩ ±1% 1/4W
18.	R46	Resistor	150KΩ ±1% 1/4W
19.	R47, R52, R58, R60, R81, R82, R83, R84	Resistor	100KΩ ±5% 1/4W
20.	R48, R49, R50, R51, R56, R57, R75, R76	Resistor	1MΩ ±5% 1/4W
21.	R55	Resistor	10KΩ ±5% 0805
22.	R59, R64, R65	Resistor	1.5KΩ ±5% 1/4W
23.	R61	Resistor	200Ω ±5% 1/4W
24.	R63	Resistor	27KΩ ±5% 1/4W
25.	R66	Resistor	2KΩ ±0.5% 1/4W
26.	R68	Resistor	88.7KΩ ±0.5% 1/4W
27.	R69, R70	Resistor	0.1Ω ±1% 1/4W
28.	R77	Resistor	100KΩ ±5% 1/8W
29.	R85	Resistor	10KΩ ±5% 1/8W
30.	C1	E. Capacitor	1000uF/16V 105ºC
31.	C2, C24	E. Capacitor	220uF/16V 105ºC
32.	C3, C7, C25, C26	Mono Capacitor	104 ±20% 50V
33.	C6	Ceramic Capacitor	221 ±20% 50V
34.	C8	E. Capacitor	10 uF/35V 105ºC

35.	C10, C11, C12, C13, C14, C15, C16, C17, C18	Capacitor	104 ±20%
36.	C19	Capacitor	2A223J
37.	C20, C22, C23	Mono Capacitor	103 ±20% 50V
38.	C21	E. Capacitor	100 uF/16V 105ºC
39.	D1	Diodes (Rectifiers)	1N5401
40.	D2, D3, D4, D5, D6, D8, D9, D10, D11, D12, D13	Diodes (Rectifiers)	1N4148
41.	D7	Diodes (Rectifiers)	SR540
42.	LED1, LED2, LED3, LED4	LED	3mm Red & Green dual color
43.	LED5	LED	3mm Red
44.	Q1, Q6, Q10	Transistor	S9014 (TO-92)
45.	Q2, Q3, Q8, Q9, Q13, Q14, Q17, Q18	Transistor	S9013 (TO-92)
46.	Q4, Q7, Q15, Q19	Transistor	RU52 (SOP-8)
47.	Q21	Transistor	RU55 (SOP-8)
48.	U1	IC	T8L05 ±2% (TO-92)
49.	U2	IC	V-6000 (DIP-18)
50.	U3	IC	CD4051 (DIP-16)
51.	U4	IC	LM358 (DIP-8)
52.	L1	Choke	RL1015-500K/C913
53.	L2	Choke	TC1306-350M/C966
54.	Y1	Resonator	4MHZ 3 Pin
55.	NTC1, NTC2, NTC3, NTC4	NTC	DHTAB103J952S
56.	VR1	Variable resistor	200K
57.		DC socket	DS-250-A-003
58.		Switch	SSF-22F04-G9-NS
59.		Plastic enclosure	Polycarbonate resin, By Bayer AG Type: 6485(f1) Class: 94-V0, UL File E41613
60.		H-Head Screw	3 x 8mm
61.		Printing circuit board	Type: ST017, Rated: 94V-0 By Sun Tat Industrial Ltd. UL file: E101438
62.		Contact plate (+)terminal	Copper Alloy
63.		Contact plate (-) terminal	Copper Alloy