



Title		
H-BRIDGE DC MOTOR DRIVER		
Size	Number	Revision
A3	IR2101	1
Date:	5/10/1400	Sheet of
File:	C:\cloud_\IR2101.SchDoc	Drawn By: ROOZBEH BABAZADEH

Quantity	LibRef	Footprint	Designator	Description	Comment
	3 Cap Pol1	C_EL_6X11	C1, C3, C5	Polarized Capacitor (Radial)	22uF/25V
	3 Cap	C0805E	C2, C4, C6	Capacitor	1uF
	1 C	C0805E	C7		100nF
	1 Cap 220uF	C_EL_10X12	C8	63VDC	470uF/35V
	1 Cap 220uF	C_EL_10X12	C9	63VDC	220uF/35V
	1 CAP_ELECTRO_P OLIMER	C_EL_10X12	C10		220UF/25V
	2 Cap 100nF, Cap	C_PLY_7X6	C12, C13	[NoValue], 63VDC	100nF/50V
	1 CAP_ELECTRO_P OLIMER	C_EL_10X12	C14		100UF/35V
	1 DIODE	D_SOD123W	D1	DIODE, GENERAL PURPOSE, 50V/1A	1N4148
	6 SCHOTTKY	D_SMA	D2, D3, D5, D6, D8, D9	DIODE, SCHOTTKY, 40V, 1A	SS110
	2 DIODE	D_SOD123W	D4, D7	DIODE, GENERAL PURPOSE, 50V/1A	1N4148
	1 SCHOTTKY	D_SMB	D10	DIODE, SCHOTTKY, 40V, 1A	SM5822
	2 HDRWF_6	WF_6	J1, J2	Header, WF, Pitch: 2.54mm	2510-6
	1 HDRWF_8	WF_8	J3	Header, WF, Pitch: 2.54mm	2510-8
	1 sip 2	PWL_2	J4	CH-02 ST pitch 3.96mm, Single Row, Vertical, 2pin	POWER IN
	1 sip 2	PWL_2	J5	CH-02 ST pitch 3.96mm, Single Row, Vertical, 2pin	OUT AB
	1 sip 3	PWL_3	J6	CH-02 STpitch 3.96mm, Single Row, Vertical, 3pin	OUT ABC
	1 CDRH127_LDNP- 560MC	CDRH127LDNP560 MC-12*12	L1	Inductor	47uH
	2 LED3mm	LED1206RED	LED1, LED2		LED3mm
	1 Multi-Turn	POT_3296W	P1	Potentiometer	10K
	6 IRFZ44PBF	TO-254	Q1, Q2, Q3, Q4, Q5, Q6	MOSFET (N- Channel)	IRFZ44PBF
	4 Res1	R0805	R1, R3, R4, R6	Resistor	20R
	3 Res1	R0805	R2, R5, R8	Resistor	10K
	2 Res1	R0805	R7, R9	Resistor	Res1
	1 R	R0805	R10		2k2
	1 R	R0805	R11		1K8
	1 Res1	R0805	R12	Resistor	330R
	3 IR2101	SO_8	U1, U2, U3	High and Low Side Driver	IR2101
	1 LM2596s	to-263-5 5d2pak LM2596S	U4		LM2596-adj