













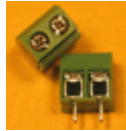



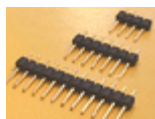
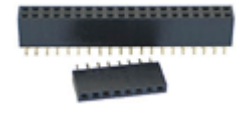




## MMG DRIVER version 4

	Micro Star PWM					Click on a component for Data Sheet
Part Number	Part Description	Amount	Cost Per	Total	Map	
			Unit	Cost	No.	
7809T	7809T - 9V 1A Positive Regulator (LM7809)	1	\$	\$	IC5	
7805T	7805T - 5V 1A Positive Regulator (LM7805)	1	\$	\$	IC6	
RFD14N05LSM	RFD14N05LSM JEDEC TO 252AA	1	\$	\$	Q2	
IRF1010E – Q1 OR RFP70N – Q1 IRF-644 – Q1	TO 220	1	\$	\$	Q1	
<b>MC-1407</b>	Highspeed Mosfet Driver DIP	1	\$	\$	IC3	
74HC14	74HC14 SOIC SMD Hex Inverter Schmitt rigger	1	\$	\$	IC4	
74HC164	74HC164 8-bit Serial Shift Register SOIC SMD	1	\$	\$	IC2	

PIC16F648A-I/P	PIC16F648A-I/SO Case SOIC W 18lead Microcontroller	1	IC1	\$		IC1	
BLUELCD16X2BL	16 x 2 Blue Character LCD Display with Backlight	1		\$	\$	LCD	
Keypad	Keypad	1		\$	\$	Keypad2	
1N4937	1N4937 600V 1A Fast Recovery Diode	2		\$	\$	D2 D3	
LED5PU	Purple 5mm Round LED	1		\$	\$	LED1	
C001U50E	1 $\mu$ F 50V Radial Electrolytic Capacitor	2		\$	\$	C6 C5	
C033U50E	33 $\mu$ F 50V Radial Electrolytic Capacitor	1		\$	\$	C4	
C220U25E	220 $\mu$ F 25V Electrolytic Capacitor	3		\$	\$	C1, C2 C3	
C100UMC	0.1 $\mu$ F (100nF) 50V Multilayer Ceramic Capacitor	3		\$	\$	C9 C10 C11	

<b>US5781</b>	<b>Unipolar Hall Switch</b>	1			external	
R470RMF	470ohm 1/4/W 1% Metal Film Resistor	1	\$	\$	R1,	
R0010KMF	1 k ohm 1/4W 1% Metal Film Resistor	2	\$	\$	R2 R11	
R0100RMF	100ohm 1/4W 1% Metal Film Resistor	1	\$	\$	R3	
R100KMF	100kohm 1/4W 1% Metal Film Resistor	1	\$	\$	R4	
R010KMF	10kohm 1/4W 1% Metal Film Resistor	1	\$	\$	R9	
R010KMF	10k ohm 1/4W 1% Metal Film Resistor	3	\$	\$	R5 R7 R8	
CERM10K	10K 1/2W Vert. Square Cermet Pot	1	\$	\$	VR1	
ICS8MT	8 Pin IC Socket- Machine Tooled	1	\$	\$	Socket	
POLHD	2 Pin .100 Polarized Header	3	\$	\$	CON2 CON4 CON5	
POLHD	3 Pin .100 Polarized Header	1			CON3	

PCBT2	2 Term. PCB 5mm Terminal Block	1	\$	\$	TB1 CON6	
POLHDDR6	6 Pin .100 <b>Right Angle</b> Male polarized Headers	1	\$	\$	Con1	
POLHDDR7	7 Pin .100 Male polarized Headers	1	\$	\$	Keyboard connector	
HEADS20	16 Pin .100" Straight Male Headers	1	\$	\$	LCD Connector	
HEADS2	3 Pin .100" Straight Male Headers	3	\$	\$	JP1 JP2 JP3 JP4 JP5	
FHEADS16	<b>FHEADS16 - 16 Pin .100" Straight Female Headers - Single Row</b>	2	\$	\$	LCD Header	
PCB	Version MMG-041 THE PCB COMES WITH PROGRAMED PIC16F648A SOIC soldered to the board				Item Number  MMG - 022	
MMG-041 KIT	<b>Version 4</b>				Item Number  MMG -023	

# MMG DRIVER version 4

## Micro Star Version 2.705

## MMG DRIVER version 4

Parts In Blue only applicable to Micro Star 2.705

Parts In Green only applicable to MMG-041

