U2
74HC4050D

VCC	1	16	NC
DATA IN	2	15	8Y
1Y	3	14	8A
1A	4	13	NC
2Y	5	12	5Y
2A	6	11	5A
3Y	7	10	4Y
3A	8	9	4A
GND			

VCC
MOSI
CS
SS
CLK
SCK
GND

U3
ATMEGA328P-AU
VCC VCC

PB0 (ICP)
PB1 (OC1A)
PB2 (SS/OC1B)
PB3 (MOSI/OC2)
PB4 (MISO)
PB5 (SCK)
PB6 (XTAL1/TOSC1)
PB7 (XTAL2/TOSC2)

PD0 (RXD)
PD1 (TXD)
PD2 (INT0)
PD3 (INT1)
PD4 (XCK/T0)
PD5 (T1)
PD6 (AIN0)
PD7 (AIN1)

ADC7
ADC6
AVCC
AREF
GND

(ADC0) PC0
(ADC1) PC1
(ADC2) PC2
(ADC3) PC3
(ADC4/SDA) PC4
(ADC5/SCL) PC5
(RESET) PC6

EN
RS
SS
MOSI
MISO   DATA OUT
SCK

RXD
TXD
ENC-A
ENC-B
DATA7
DATA6
DATA5
DATA4

R1 1M
X1

ENC-SW
SD DETECT
BUZZER

VCC
R2 1K
RST
C4 0.1uF
REST
GND

C3 0.1uF
VCC
GND

DISPLAY
LCD1602

GND
VCC
RS
RW
EN
E
RB0
RB1
RB2
RB8
RB4
RB6
RB7
BL1
BL2

VSS
VCC
VO
RS
RW

DATA4
DATA5
DATA6
DATA7

R10 100R
VCC
GND

R_L5
VCC
GND

SD

CS	9		DATA2
DATA IN	1		CD/DATA3
	2		CMD
3.3V	3		VSS
CLK	4		VDD
	5		CLK
	6		VSS
DATA OUT	7		DATA0
	8		DATA1
SD DETECT	10		CDN
	11		WP

GND
R5 1K
GND

ICSP
MOSI1
MISO2
SCK3
RST4

MOSI
MISO
SCK
RST
GND
VCC

GND
VCC

G-Sender
STOP
RXD
TXD
GND
VCC

1
2
3
4
5

GND
STOP

VCC
R3 10K
Q1
BUZZER
R4 1K
GND
BUZZER

ENCORDERS
ENC-A
ENC-B
ENC-SW
R8 10K
R7 10K
R9 10K
VCC
GND

U1
RT9193

VCC 1 VIN VOUT 5 3.3V
2 GND
VCC 3 CE NC 4

C1 0.1uF
C2 10uF
GND

VCC
R6 1K
L1
GND

Comment	Description	Designator	Footprint	LibRef	Quantity
BUZZER		BUZZER	BUZZER	BUZZER	1
0.1uF		C1, C3, C4	0805	C-0805	3
10uF		C2	0805	C-0805	1
LCD1602		DISPLAY	LCD1602	LCD1602	1
ENCORDERS		ENCORDERS	ENCORDERS	ENCORDERS	1
XH2.54-5P		G-Sender	XH2.54-5P	XH2.54-5P	1
ICSP		ICSP	ICSP	ICSP	1
LED-0805		L1	led-0805	LED-0805	1
S8550		Q1	SOT-23	S8550	1
1M		R1	0805	R-0805	1
1K		R2, R4, R5, R6	0805	R-0805	4
10K		R3, R7, R8, R9	0805	R-0805	4
100R		R10	0805	R-0805	1
RESISTOR-10K		RES	RESISTOR	RESISTOR	1
KEY-3*4		REST	KEY-3*4	KEY-3*4	1
SD		SD	SD	SD	1
KEY-6-6-V		STOP	KEY-6-6-V	KEY-6-6-V	1
RT9193		U1	SOT-23-5	RT9193	1
74HC4050D		U2	SOP-16	74HC4050D	1
ATMEGA328P-AU		U3	TQFP32	ATMEGA328P-AU	1
16M		X1	XTAL-CSTCE	XTAL-CSTCE	1