+5V +5V

C1 C2

GND GND

+5V

U2

4	VCC	PC0	23	VOICE1
6	VCC	PC1	24	VOICE2
18	AVCC	PC2	25	VOICE3
		PC3	26	VOICE4
19	ADC6	PC4	27	VOICE5
22	ADC7	PC5	28	
		PC6	29	RST

C5

GND

| 20 | AREF |

12	PB0	PD0	30
13	PB1	PD1	31
14	PB2	PD2	32
15	PB3	PD3	1	SIGNAL1
16	PB4	PD4	2
17	PB5	PD5	9	TX1
7	PB6	PD6	10	SIGNAL2
8	PB7	PD7	11	SIGNAL3

TX2
TX3
MOSI
MISO
SCK

C6

Y1 16Mhz

C7

GND

3	GND
5	GND
21	GND

GND

Atmega328p

U1
Sound Module

+5VBOOST

GND

1	5V
2	GND
3	GND
4	A1	VOICE1
5	A2	VOICE2
6	A3	VOICE3
7	A4	VOICE4
8	A5	VOICE5
9	A6
10	A7
11	A8
12	A9
13	A10
14	CYN
15	BY

Voice Module

+8V2 D1 SS54 T1 1 3 +5V-1 Regulator

+ C3 100uF/10V + C4 100uF/10V

GND

+8V2 D2 SS54 T2 1 3 +5V-2 Regulator

+ C8 100uF/10V + C9 100uF/10V

GND

+5V

R1

RST

RST

GND

SIGNAL

SIGNAL1	1	1
SIGNAL2	2	2
SIGNAL3	3	3

Screw Terminal Block 3pin

DATA

TX3	1	1
TX2	2	2
TX1	3	3

Screw Terminal Block 3pin

+5V-1 5V 1 1 / 2 2 GND
+5V-2 5V 1 1 / 2 2 GND
+5V-3 5V 1 1 / 2 2 GND
+8V2 8V2 1 1 / 2 2 GND

+8V2 D3 SS54 T4 1 3 +5V-3 Regulator

+ C10 100uF/10V + C11 100uF/10V

GND

+5V R2 D4 GND
0603

MISO J? +5V
SCK MOSI
RST

MISO	1	2	
SCK	3	4	MOSI
RST	5	6	

HDR 2x3

GND

DC 8v2 +8V2

| 1 |
| 2 |
| 3 |

DC 12V

GND

+8V2 D5 SS54 T6 1 3 +5V Regulator

+ C12 100uF/10V + C13 100uF/10V

GND

+8V2 **PWR MODULE** +5VBOOST

| 1 | IN+ OUT+ | 4 |
| 2 | IN- OUT- | 3 |

GND Module GND

Comment	Description	Designator	Footprint	LibRef	Quantity
Screw Terminal Block 2pin		5V, 8V2	screw terminal block 2 pin	Screw Terminal Block 2pin	4
100nf	100nf/16V 0805 SMD Capacitor	C1, C2, C5	CAP_0805	C_0805_100nf	3
100uF/10V	CAP ALUM 100UF 20% 10V SMD	C3, C4, C8, C9, C10, C11, C12, C13	Cap Electrolytic Dip	Cap Electrolytic DIP	8
22pf	22pf/16V 0805 SMD Capacitor	C6, C7	CAP_0805	C_0805_22pf	2
SS54	Diode	D1, D2, D3, D5	DO-214AC	Diode_SMA	4
Blue SMD	LED SMD LED	D4	0603D BLUE	LED_0603	1
Screw Terminal Block 3pin		DATA, SIGNAL	screw terminal block 3 pin	Screw Terminal Block 3pin	2
DC 12V	DC Socket DIP 12V	DC 8v2	DC Socket 12V	DC_Socket 12V	1
HDR 2x3	CONN HEADER 6POS .100 STR 15AU	J?	HDR 2x3 2.54mm	67997-206HLF	1
Module	LM2596 Step Down Module	PWR MODULE	LM2596 Module	LM2596 Module	1
R_0805_10K	10K/1% 0805 SMD Resistor	R1	RES_0805	R_0805_10K	1
R_0805_1K	1K/1% 0805 SMD Resistor	R2	RES_0805	R_0805_1K	1
SMD	SMD PUSH Button	RST	SMD Tactile Switch	ButtonTACT	1
Regulator	Regulator 12 to 5V	T1, T2, T4, T6	7805 regulator	7805	4
Voice Module		U1	Voice Playback	Voice Module	1
Atmega328p	Atmega328P SMD 32Pin's	U2	TQFP_32	Atmega328p SMD	1
16Mhz	CRYSTAL 16Mhz SMD	Y1	Crystall	16Mhz	1