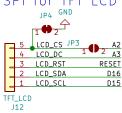
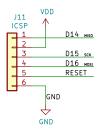


SPI for TFT LCD



ICSP CONNECTOR



IR Transmitter Volume Tunner

3x8 KFYPAD MATRIX

J5 ROW1	L	J6 ROW2		J7 ROW3	
ROW1 16	15 COL8	ROW2 16	15 COL8	ROW3 16	15 COL8
ROW1 14	13 COL7	ROW2 14	13 COL7	ROW3 14	13 COL7
ROW1 12	11 COL6	ROW2 12	11 COL6	ROW3 12	11 COL6
ROW1 10	9 COL5	ROW2 10	9 COL5	ROW3 10	9 COL5
ROW1 8	7 COL4	ROW2 8	7 COL4	ROW3 8	7 COL4
ROW1 6	5 COL3	ROW2 6	5 COL3	ROW3 6	5 COL3
ROW1 4	3 COL2	ROW2 4	3 COL2	ROW3 4	3 COL2
ROW1 2	1 COL1	ROW2 2	1 COL1	ROW3 2	1 COL1
]]		J

Hallollicce	votuille	- Lullill
J2	J3	
IR_TX	VOL_TUNNER	
3 VDD	3	VDD
2 GND	2	GND
_ 1 IR_SEND	1 VOLUM	E_TUNNER

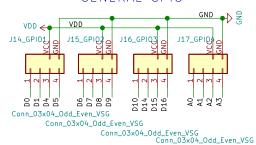
IR Receiver

	RECEIVEL	
	J1	
IF	R_RX	GND
G	3 VDD	VDD
-	2 GND	SCL
-	1 IR_RECV	SDA
_	-	

I2C	DEV	ICE
CON	NEC	TOR

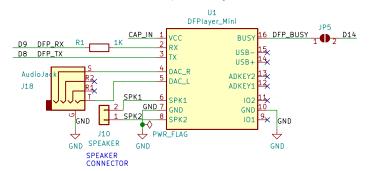
	J4			
		- 1	2C	
GND	8		7	GND
VDD	6		5	VDD
SCL	4		3	SCL
SDA	2		1	SDA
			ı	

GENERAL GPIO



DFPlayer MINI

operation voltage: 3.2V-5.0V



Digital pins available For Interrupts on ATmega32U4 are 0, 1, 2, 3, 7 for the sake of supporting wake-up function we choose ROW1 at 00 ROW2 at D1

Power Switch

+5٧

Batt

2 GND

 \rightarrow

GND

Sparkfun Pro Micro

2 DO/RXD

1 D1/TXD

6 D3/SCL

7 D4/A6

SDA 5 D2/SDA

SCL

_D5 IR_SEND_ROW3_8

VIN->LDO->5V Sparkfun Pro Micro's VIN range: 7V-12V ATmega32u4's operation voltage(5V pin): 2.7V-5.5V

Sparkfun_Pro_Micro

11 D8/A8 D13/LED GND 3 12 D9/A9 D17/RX_LED GND 4

13 D10/A10 D16/MOSI 15 D14/MISO D15/SCK

RESET

D20/A2

D19/A1

D18/A0

GNE

+5V 21

D21/A3 20 A3

19 A2

J9 🔼

D1

SM340A

+BATT

+50

J8

PWR_SW

POWER SWITCH 2 VDD 1 SRC_FOR_VDD

U2

BB-4056

GND BAT

BATTERY

DO ROW1

D1 ROW2

D4 COL1

D6 COL2

D7 IR_RECV

_D8 DFP_TX

D9 DFP_RX

D14 COL5 MISS

D10 COL3

D2

D3

CONNECTOR

GND

GND

For SoftwareSerial Not all pins on the Leonardo and Micro support change interrupts, so only the following can be used for RX: 8, 9, 10, 11, 14 (MISO), 15 (ŠCK), 16 (MOSI).

c1 Super

GND

PWR_FLAG OT HOUSE

BEFORE BURNING YOUR TEST CODE to the BOARD >>> JP1 is RECOMMENTED to be CONNECTED <-<

Or you will see ERROR messages on Arduino IDE like ...

avrdude: verification error, first mismatch at byte 0x0008

RESET

18 A1 VOLUME_TUNNER

CAP_IN

D2

SM340A

Capacitor

VDD

1

DC

COL6

COL4

D16 Mosi

D15 scк

GND

 \Rightarrow

GND

Sheet: / File: HappyAAC-Type-A.sch

Title: HappyAAC type A

Date: 2021-08-02 Size: A4 Rev: 0.2e KiCad E.D.A. kicad 5.1.10 ld: 1/1