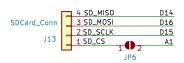
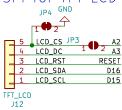
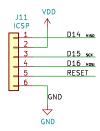
## SPI for SD CARD



## SPI for TFT LCD



## ICSP CONNECTOR



## IR Transmitter Volume Tunner

## 3×8 KEYPAD MATRIX

J5 ROW1	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

	volunic runni
J2	J3
IR_TX	VOL_TUNNER
3 VDD	☐ 3 VDD
2 GND	2 GND
1 IR_SEND	1 VOLUME_TUNNER

ROW1	ROW2	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

GND



c1 Super 1.5F Capacitor

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 0xff != 0x0c

CAP\_IN

D2

SM340A

### Sparkfun\_Pro\_Micro

Sparkfun Pro Micro

Power Switch

+57

Batt

2 GND

GND

J9

J8

PWR\_SW POWER SWITCH 2 VDD 1 SRC\_FOR\_VDD

U2

BB-4056

GND BA

BATTERY

CONNECTOR

GND 1 GND

VDD

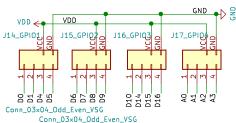
SM340A



# IR Receiver

RECEIVEL					
				J4	
J1	12C				
IR_RX			- 1	20	
_	GND	8 1		_ 7	GND
3 VDD	VDD	6		5	VDD
2 GND	SCL	4		3	SCL
1 IR_RECV	SDA	2		1	SDA

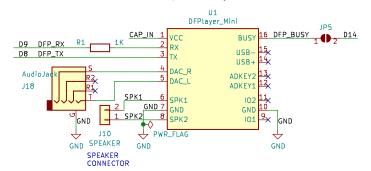
# GENERAL GPIO



Cann\_03x04\_0dd\_Even\_VSG Conn\_03x04\_0dd\_Even\_VSG

# DFPlayer MINI

operation voltage: 3.2V-5.0V



12C DEVICE

CONNECTOR

ATmega32U4 digital Pins
Usable For Interrupts are 0, 1, 2, 3, 7

ROW1 at DO ROW2 at D1 IR RECV at D7

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 (SCK), 16 (MOSI).

File: HappyAAC-Type-A-2c.sch

Title: Happy	AAC Type A
C: 1/	D 1 2024

Date: 2021-04-20 Rev: 2c KiCad E.D.A. kicad 5.1.9 ld: 1/1