Power supply

To be used with Launchpad: LAUNCHXL-F28377S
remove jumper J1

U$5
uA78M33
VI VO
GND

+3V3
C3
GND
GND
+5V
C2
GND

IR receive and transmit

VS GND OUT
+3V3
GND
IR_RECEIVE

R9 100
D4 IR LED
Q1 2N7000
+5V
R8 1k
IR_LED
GND

Switch

PUSH
R10 10K
GND
S1
RDT1034
+3V3

LEDs

GREEN_LED
R2 1K
D3
GND
LED_RED
R7 1K
D1 Yellow LED
+5V
GND

Solid State Relay

HOT
K2 APF30212A
NO COM
LOAD
+5V
Q3 2N7000
GND
R12 1k
SS_RELAY

Zero-Cross reference

ZERO_CROSS
R6 1k
+3V3
OK1 H11A5M
GND
R5 10k
NEUTRAL
HOT

Audio Driver

ADC_AUDIO
R3 10K
+3V3
R4 10K
GND
C1
AUDIO_GROUND
THAT1250
AUDIO_RIGHT
+12V
GND
AUDIO_LEFT
-12V
GND

Top-Right of Launchpad

GND
J2-10 J2
J2-9
J2-8
J2-7
J2-6
J2-5
J2-4
J2-3
J2-2
J2-1
ZERO_CROSS
LED_RED
GREEN_LED
IR_LED
IR_RECEIVE
SS_RELAY
PUSH
J4-10
J4-9
J4-8
J4-7
J4-6
J4-5
J4-4
J4-3
J4-2
J4-1 J4

Bottom-Right of Launchpad

GND
J6-10 J6
J6-9
J6-8
J6-7
J6-6
J6-5
J6-4
J6-3
J6-2
J6-1
J8-10
J8-9
J8-8
J8-7
J8-6
J8-5
J8-4
J8-3
J8-2
J8-1 J8

Relay

GND
SWITCHED_12VDC
SWITCH_COMMON
SWITCH_N_O
LOAD
HOT
NEUTRAL
GND
Q1 K1 S1 P1
Q2 K1 S2 P2
Q3 K1 S3 P3
+12V
K1 LY30
D2 1N4004
Q2 2N7000
GND
+12V
R1 1k
MECH_RELAY

Top-Left of Launchpad

J3-1 J3
J3-2
J3-3
J3-4
J3-5
J3-6
J3-7
J3-8
J3-9
J3-10
GND
+5V
ADC_AUDIO
J1-1 J1
J1-2
J1-3
J1-4
J1-5
J1-6
J1-7
J1-8
J1-9
J1-10
MECH_RELAY
+3V3

Bottom-Left of Launchpad

J7-1 J7
J7-2
J7-3
J7-4
J7-5
J7-6
J7-7
J7-8
J7-9
J7-10
GND
+5V
J5-1 J5
J5-2
J5-3
J5-4
J5-5
J5-6
J5-7
J5-8
J5-9
J5-10
+3V3

Audio Jacks

AUDIO_RIGHT
AUDIO_LEFT
AUDIO_GROUND
AUDIO_GROUND
R11
ACJM-MHDR
GND3 R3 R1
GND2 R2
GND1 L1
L2
U$2
ACJM-MHDR
GND3 R3 R1
GND2 R2
GND1 L1
L2
U$3

Marley_PetCam_RevA
1/12/2016 10:39 AM
Sheet: 1/1