SCHEMATIC DIAGRAMS

PRODUCT NAME   AP02 ESP32 MCU

UNIT NAME

UNIT NO. DTNESPMCULF0

PWA NAME

PWA NO.

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REV. MARK	CONTENTS	APPROVED BY	REVISED BY	REGISTERED
01	Add resistor(R709)			2022/02

APPROVED BY	CHECKED BY	DESIGNED BY	TITLE	TOTAL	PAGE NO.	REV. MARK	DRAWING. NO.
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ESP32-WROOM-32
WIFI MODULE
[DL32]
IC700

P3R3V
10k(J) R702
P3R3V
10k(J) R703

700	703	EN	3	EN
703	A0		4	SENSOR_VP
703	A3		5	SENSOR_VN
701	703	D1	35	TXD0
701	703	D0	34	RXD0

100nF(K)25V C702

NC 32 NC

NC 19 SCS/CMD
NC 20 SCK/CLK
NC 21 SDO/SD0
NC 22 SDI/SD1
NC 17 SHD/SD2
NC 18 SWP/SD3

P3R3V
3V3 2

47uF(M)10V C700
47uF(M)10V C701
10uF(M)25V C703
100nF(K)25V C704

GND

IO0 25 IO0 700
IO2 24
IO4 26 D2 703
IO5 29 D10
IO12 14 D4 703
IO13 16 D5
IO14 13 D6
IO15 23 D7
IO16 27 D9
IO17 28 D8
IO18 30 D13
IO19 31 D12
IO21 33 SDA
IO22 36 SCL
IO23 37 D11
IO25 10 A1
IO26 11 A2
IO27 12 D3 703
IO32 8
IO33 9
IO34 6 A4 703
IO35 7 A5

FC-12M 32.768000kHz 7.0 +20.0-20.0
NOT MOUNT
32.768kHz
X700

NOT MOUNT C705
NOT MOUNT C706

GND

10k(J) R704

GND 1
GND 15
GND 38
GND 39

GND

EN 700 703

701 DTR
10k(J) R700 B
2SC6026MFV Q700
C
E

701 RTS
10k(J) R701 B
2SC6026MFV Q701
C
E

IO0 700

Auto program
DTR DTS EN IO0
1   1   1   1
0   0   1   1
1   0   0   1
0   1   1   0

EVQP7B01P
[DSW28] S700
EN
2   1
3   4
GND

EVQP7B01P
[DSW28] S701
Boot
2   1
3   4
GND

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VBUS-IN

FT232RQ

USB/UART

[DL232A]
IC701

P3R3V-FT232

TS3A4751RUCR

ANALOG SW

[DL4751]
IC702

P3R3V

10M(J)
R707

UART TX LED   UART RX LED
R705   R706
2.7k(J)   2.7k(J)
DS700   DS701
SML-A12YBTT86 SML-A12YBTT86

18	RESET#
27	OSCI
28	OSCO

TXD 30
RXD 2
RTS# 32   RTS 700
CTS# 8
DTR# 31   DTR 700
DSR# 6
DCD# 7
RI# 3

13 IN1
5   IN2
6   IN3
12 IN4

1   NO1   COM1 2   D0 700 703
3   NO2   COM2 4   D1 700 703
NC 8   NO3   COM3 9   NC
NC 11 NO4   COM4 10 NC

702 USB-DP   14 USBDP   CBUS0 22
702 USB-DN   15 USBDM   CBUS1 21
                            CBUS2 10
                            CBUS3 11
                            CBUS4 9

P3R3V

14 VCC   GND 7

C711
25V100nF(K)

GND

[POWER]

16 3V3OUT   TEST 26
                  NC 5
                  NC 12
                  NC 13
                  NC 23
                  NC 25
                  NC 29

VBUS-IN

P3R3V-FT232

19 VCC   GND 4
           GND 17
           GND 20
1   VCCIO AGND 24
           EXP_PAD 33

GND

100nF(K)25V 4.7uF(K)25V 100nF(K)25V 100nF(K)25V
C707   C708   C709   C710

GND

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micro USB Connector
47642-0001

MPZ1005S300CT000
FL700

VBUS-IN

MAX40200ANS+T
UREG
[DL40200]
IC704

USB-DN
USB-DP

VBUS

XCL222B331ER-G
UREG
[DL22X]
IC703

MAX40200ANS+T
UREG
[DL40200]
IC705

P3R3V-FT232

P3R3V

Leaf I/F

VBUS   P3R3V

DP700

	Leaf I/F
	[DC58E]
	CN701
F1	3.3V
F2	SWDIO
F3	VBUS
F4	AREF
F5	RESET
F6	A0
F7	D6
F8	A1
F9	D7
F10	A2
F11	D8
F12	A3
F13	D9
F14	A4
F15	D10
F16	A5
F17	D11
F18	D0
F19	D12
F20	D1
F21	D13
F22	D2
F23	SDA
F24	D3
F25	SCL
F26	D4
F27	GND
F28	D5
F29	SWCLK
B1	3.3V
B2	SWDIO
B3	VBUS
B4	AREF
B5	RESET
B6	A0
B7	D6
B8	A1
B9	D7
B10	A2
B11	D8
B12	A3
B13	D9
B14	A4
B15	D10
B16	A5
B17	D11
B18	D0
B19	D12
B20	D1
B21	D13
B22	D2
B23	SDA
B24	D3
B25	SCL
B26	D4
B27	GND
B28	D5
B29	SWCLK

700 EN
700 A0
700 D6
700 A1
700 D7
700 A2
700 D8
700 A3
700 D9
700 A4
700 D10
700 A5
700 D11
700 701 D0
700 701 D12
700 701 D1
700 D13
700 D2
700 SDA
700 D3
700 SCL
700 D4
700 D5

GND

DESIGNED BY	TITLE	FUNCTION	SH. NO.	PAGE NO.	REV. MARK	DRAWING. NO.
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