+5V2
+4V7

J1-1
U3
VIN  VOUT  5
ON/OFF  N/C  4
3
GND
2
C3
C
C?
C
NP0
C?
10u

U2-7,25,55
CPU XC888LM-8FFI 5V
PQFP64  U2
or
CPU XC888CLM-8FFI 5V

J1-2
U2-26,54
GND
LP2980-4.7
L37B

VPP
U6
J1-4  +26V
8 IN  OUT 1  +24V
GND GND GND GND
2  3  6  7
MC78L24_SO8
GND

U2-6 (Vcore)
C?  C?
C  C
U2-5 (Vcore-GND)
GND

GND
2
Y1
1
3
R?
1M
U2-3 (Xtal2)
U2-4 (Xtal1)

+4V7
U2-32 (Varef)

+4V7
VPP
8
3 ++
2 --
U7A
33072
1
R?
22
+10V  J6-5
4
-5V

U2-31 (Vagnd)
GND

U2-53 (reset)

U2-56
U2-57

R?
6k8
D6
D
R?
39k

R?
2k7
R?
3k3
GND

Uo = (6.8/6 + 1) * 4.7 = 10.027 V

C?
1u
+4V7
U5
TPS60400
PFKI
3 Cfly-  Cfly+ 5
2 Vin  GND  Vout 1  -5V
4
GND

TXD  J1-6
RXD  J1-7

J1-5
FAN
U2-21  R?  1k
Q11
BC817
6AW
GND

+5V2
D?
BAS28b
J6-10

D7
BAS28a
RL1
RE030005
J6-11

U2-18
Q10
MMBF170
6Z
GND

inputs
File: inputs.kicad_sch

display
File: display.kicad_sch

Power supplies and CPU.
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Sheet: /
File: ode2-control.kicad_sch
Title: ODE2 CONTROL
Size: A4     Date: 2024-09-07     Rev: ISSUE 12
KiCad E.D.A.  kicad (6.0.11)     Id: 1/3

CPU U2-43 — R2 470 — 13 a
CPU U2-44 — R3 470 — 12 b
CPU U2-49 — R7 470 — 6 c
CPU U2-50 — R6 470 — 5 d
CPU U2-51 — R5 470 — 4 e
CPU U2-52 — R1 470 — 14 f
CPU U2-41 — R4 470 — 11 g
CPU U2-42 — R8 470 — 7 DPX

DISP1
H36010LWB

Compatible With KEM-3661-ASR

DP1  DP2  DP3  DP4  DP5  DP6

CC1  CC2  CC3  CC4  CC5  CC6
1    2    3    10   9    8

+4V7

R9
4k7

CPU U2-59 — 1  Q1 MMBF170 6Z  GND
CPU U2-60 — 1  Q2 MMBF170 6Z  GND
CPU U2-61 — 1  Q3 MMBF170 6Z  GND
CPU U2-40 — 1  Q5 MMBF170 6Z  GND
CPU U2-45 — 1  Q6 MMBF170 6Z  GND
CPU U2-46 — 1  Q4 MMBF170 6Z  GND

<1>   SW1  SW_SPST4   D1 BAS28 JT
(0)   SW4  SW_SPST4   D1 BAS28
<=>   SW2  SW_SPST4   D3 BAS28 JT
UP    SW3  SW_SPST4   D3 BAS28
DOWN  SW5  SW_SPST4   D2 BAS28 JT
-spare-  SW6  SW_SPST4   D2 BAS28
-spare-  SW7  SW_SPST4

CPU U2-48

Display and key switch matrix.
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Size: A4    Date: 2024-08-07    Rev: ISSUE 12
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Sheet: /inputs/
File: inputs.kicad_sch

**Title: ODE2 CONTROL**

| Size: A4 | Date: 2024-08-20 | Rev: ISSUE 12 |
| KiCad E.D.A. kicad (6.0.11) | | Id: 3/3 |