

# PC-Engine CDR-30A (CD-ROM2) Schematics – FRONT PWB

TR401\_B and TR402\_N must be PWM signals

W402 Conn\_01x11

1 SPL\_MOTOR\_BLACK  
2 SPL\_MOTOR\_RED  
3 MRST  
4 DIGIT1\_EN  
5 DIGIT2\_EN  
6 RS\_EN  
7 DISP\_LATCH  
8 PLAY\_PAUSE  
9 FS\_RS  
10 REPEAT  
11 STOP

TestPoint TP2  
TestPoint TP1

S404 SW\_Push  
RS  
S403 SW\_Push  
FS  
S401 SW\_Push  
STOP  
S402 SW\_Push  
PLAY/PAUSE  
S405 SW\_Push  
REPEAT

D402  
D401

DIGIT1\_EN  
DIGIT2\_EN

Q401 2SD1664  
Q402 2SD1664

LD401 LB202VB  
CA\_D1  
CA\_D2

Q1 Q2 Q3 Q4 Q5 Q6 Q7  
a b c d e f g  
DP

R402 R403 R405 R407 R404

Q[0..7]

LD402 GREEN  
R409 100

W401 Conn\_01x10

1 2 3 4 5 6 7 8 9 10  
D7 D6 D5 D4 D3 D2 D1 D0

D7 D6 D5 D4 D3 D2 D1 D0  
D0 D1 D2 D3 D4 D5 D6 D7

IC401 74AHC273  
VCC  
GND  
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7

DISP\_LATCH  
MRST

R401

+5V  
GND

C401 100nF

W401  
1 5V  
2 GND  
3 D7 connects directly to IC 109 PIN 3  
4 D6 connects directly to IC 109 PIN 4  
5 D5 connects directly to IC 109 PIN 5  
6 D4 connects directly to IC 109 PIN 6

W402  
1) SPL\_MOTOR\_RED connects directly to IC 104 PIN 2  
2) SPL\_MOTOR\_BLACK connects directly to IC 104 PIN 3  
3) Mr connects directly to IC 108 PIN 22 + RC circuit for voltage detection IC 302  
4) TR401\_B connects directly to IC 108 PIN 8  
5) TR402\_B connects directly to IC 108 PIN 9  
6) PIN6 connects to IC 108 PIN 23 through 10k resistor  
7) DISP\_LATCH connects to AAK diode D105 and then IC108 and IC109  
8) PLAY\_PAUSE connects directly to IC 108 PIN 35  
9) FS\_RS connects directly to IC 108 PIN 34  
10) REPEAT connects directly P106 PIN 2 and to IC 108 PIN 33 through a 2k2 resistor  
11) STOP connects directly to IC 108 PIN 32

PWR\_FLAG  
PWR\_FLAG

+5V  
GND

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- 1) SPL\_MOTOR\_RED connects directly to IC 104 PIN 2
- 2) SPL\_MOTOR\_BLACK connects directly to IC 104 PIN 3
- 3) Mr connects directly to IC 108 PIN 22 + RC circuit for voltage detection IC 302
- 4) TR401\_B connects directly to IC 108 PIN 8
- 5) TR402\_B connects directly to IC 108 PIN 9
- 6) PIN6 connects to IC 108 PIN 23 through 10k resistor
- 7) DISP\_LATCH connects to AAK diode D105 and then IC108 and IC109
- 8) PLAY\_PAUSE connects directly to IC 108 PIN 35
- 9) FS\_RS connects directly to IC 108 PIN 34
- 10) REPEAT connects directly P106 PIN 2 and to IC 108 PIN 33 through a 2k2 resistor
- 11) STOP connects directly to IC 108 PIN 32

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W401
1) 5V
2) GND
3) D7 connects directly to IC 109 PIN 3
4) D6 connects directly to IC 109 PIN 4
5) D5 connects directly to IC 109 PIN 5
6) D4 connects directly to IC 109 PIN 6
7) D3 connects directly to IC 109 PIN 7
8) D2 connects directly to IC 109 PIN 8
9) D1 connects directly to IC 109 PIN 9
10) D0 connects directly to IC 109 PIN 10

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PWR\_FLAG  +5V  
PWR\_FLAG  GND

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