

REV	REF	DATE	DRAWN BY
1	Revision 1	11-02-04	DFI
2	Revision 2	15-06-04	DFI

A

B

C

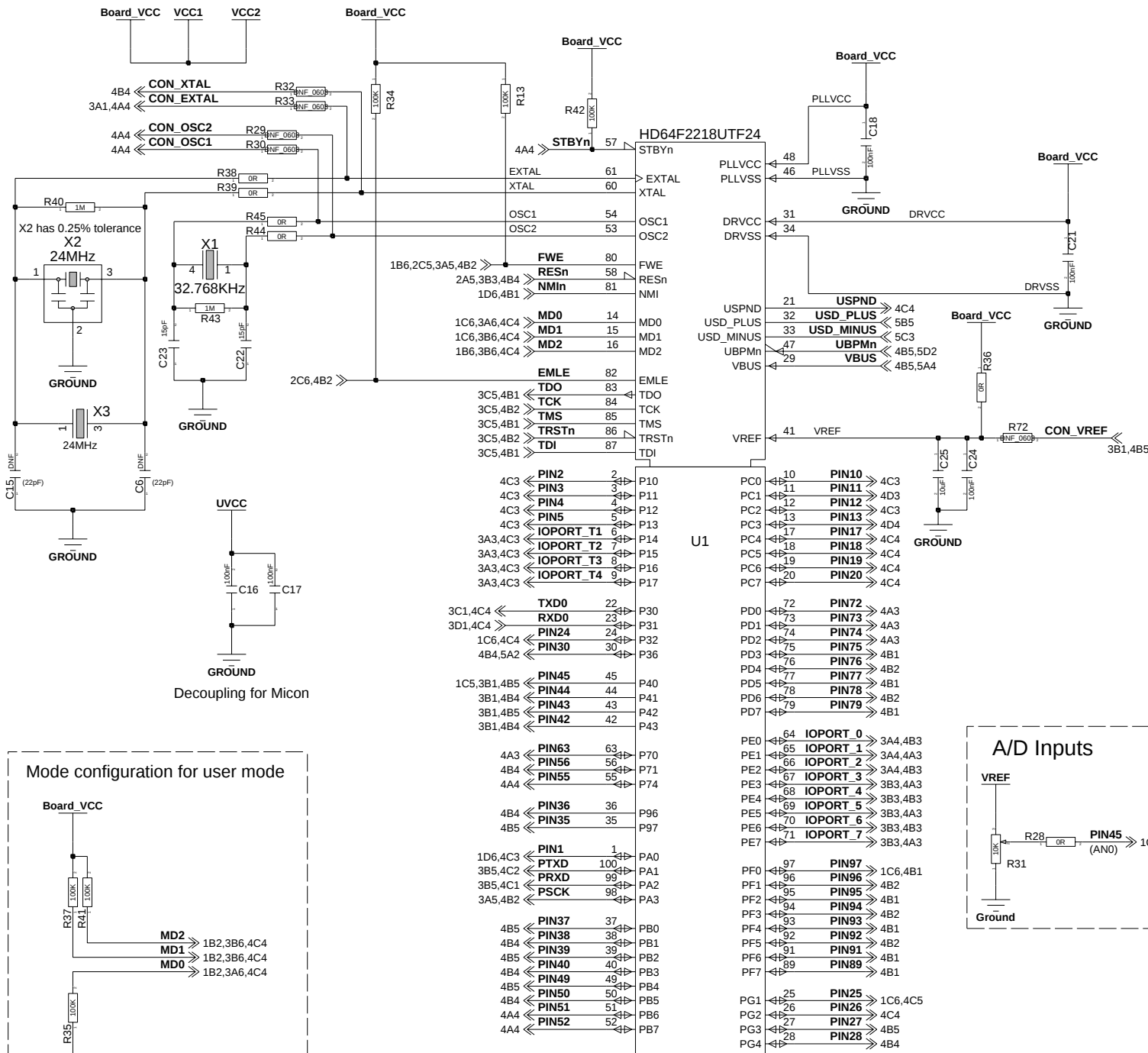
D

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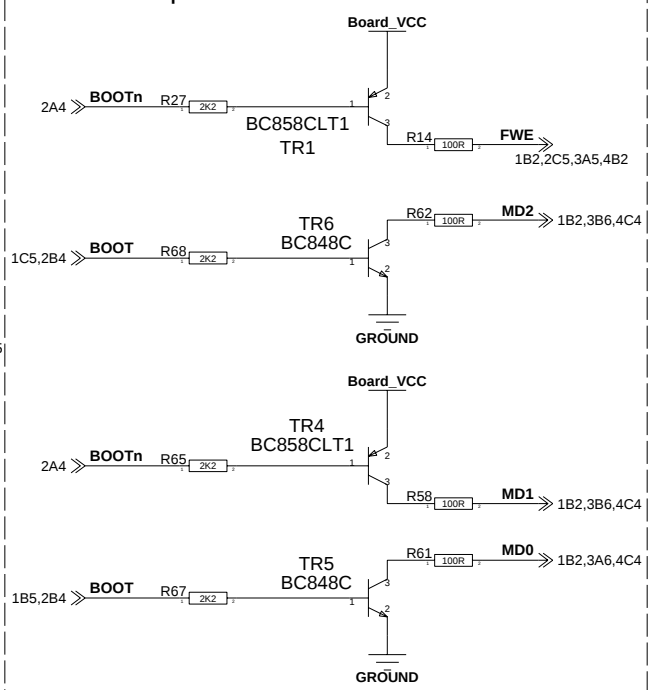
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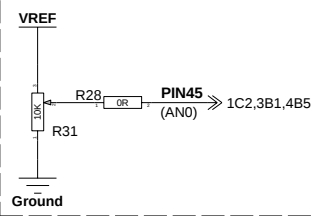
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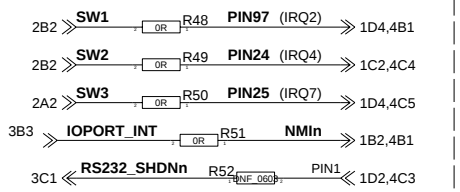
Transistor inputs for the BOOT & FWE Pin states



A/D Inputs



Configuration OR links



SIZE A4				
RENESAS TECHNOLOGY EUROPE LTD				
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UNITED KINGDOM				
SCHEMATIC TITLE				
3DK2218				
SHEET TITLE				
Micon				
DRAWN BY	DATE	REV	DRAWING NUMBER	PAGE
D.Fife	15-06-04	2	D005312_04	1/5

SWITCHES

The diagram illustrates the connection of four push-button switches (SW1, SW2, SW3, RES) to a microcontroller (U2) and a reset circuit (U3).

Switches and Pull-up Resistors:

- SW1/BOOT:** Connected to pin 13 of U2. Pull-up resistor R9 (100K) to Board_VCC.
- SW2:** Connected to pin 11 of U2. Pull-up resistor R7 (100K) to Board_VCC.
- SW3:** Connected to pin 10 of U2. Pull-up resistor R5 (100K) to Board_VCC.
- RES:** Connected to pin 4 of U2. Pull-up resistor R2 (100K) to Board_VCC.

Microcontroller (U2: SN74HC74D) Configuration:

- VCC:** Board_VCC
- 1S, 1D, 1R:** Connected to Board_VCC.
- 2S, 2D, 2R:** Connected to GROUND.
- NC (pin 6):** Not connected.
- BOOTn (pin 9):** Connected to pin 5 of U2.
- BOOT (pin 8):** Connected to a green LED (D3, 1N4148W) through resistor R8 (320R) to GROUND.

Reset Circuit (U3: BD5231G):

- VCC:** Board_VCC
- CT (pin 5):** Connected to the collector of transistor TR7 (BC848C).
- RESET (pin 1):** Connected to the output of U2 (pin 5).
- RESn (pin 1):** Output signal, connected to pins 1B2, 3B3, and 4B4.
- Capacitors:** 10nF C14 to GROUND.

Other Components:

- TR7 (BC848C):** NPN transistor used for reset.
- D3 (1N4148W):** Green LED connected to the BOOT pin.
- Capacitors:** 100nF C2, C3, and C1 to GROUND.

Jumper Configuration

The diagram illustrates the jumper configurations for two pins, J14 and J15, on a PCB. Both pins are labeled M20-9990206 and have a GROUND connection. The FWE jumper is configured for 1B2, 3A5, and 4B2. The EMLE jumper is configured for 1B2 and 4B2.

FWE Jumper Configuration:

- Pin: J14
- Label: FWE
- Configuration: 1B2, 3A5, 4B2

EMLE Jumper Configuration:

- Pin: J15
- Label: EMLE
- Configuration: 1B2, 4B2

PSU

5B2 **USB_Supply**

J9
KLD-SMT2-0202A

NC 4 NC 1.2 3

D1
1N4148W

SW4

Supply

U4
XC6204B332MR

VIN
CE
VOUT

D2 DNF
1N4148W

Board_VCC

UVCC

C4 1uF
C5 100nF

C7 1uF
C8 100nF

GROUND

T3 T1 T2
Ground test points
for probe connection

J11
M20-9990206

R11
1206 0R

DNF

1206 0R link may be replaced
with shunt resistor

**Current
Measurement**

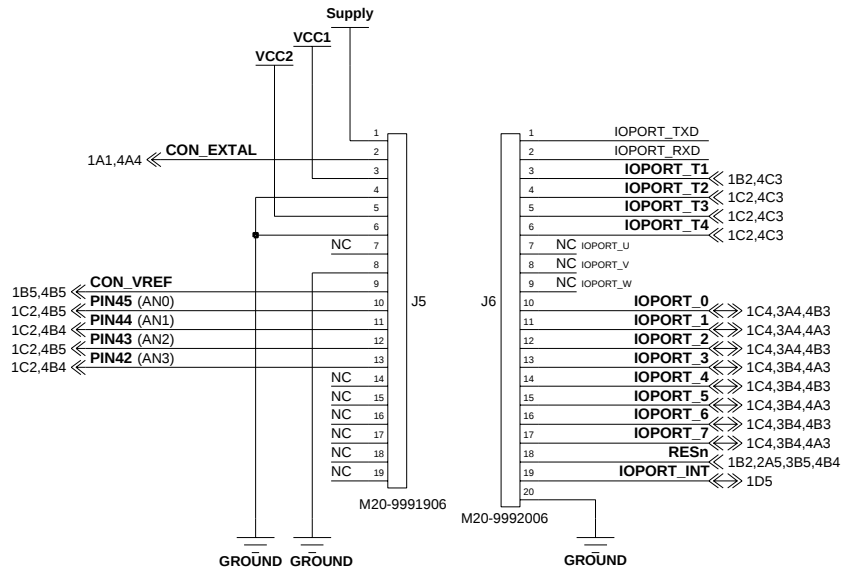
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UNITED KINGDOM

SCHEMATIC TITLE	3DK2218
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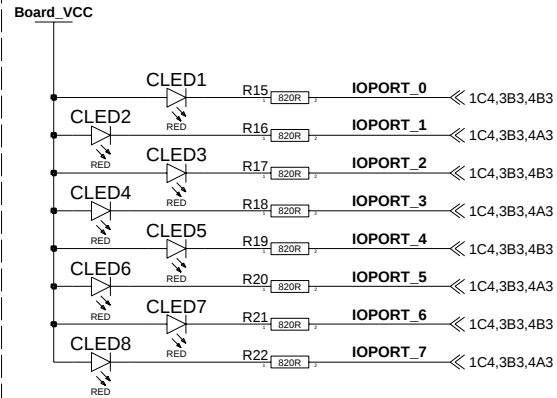
SHEET TITLE	Switches and PSU
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DRAWN BY	DATE	REV	DRAWING NUMBER	PAGE
D.Fife	15-06-04	2	D005312_04	2/5

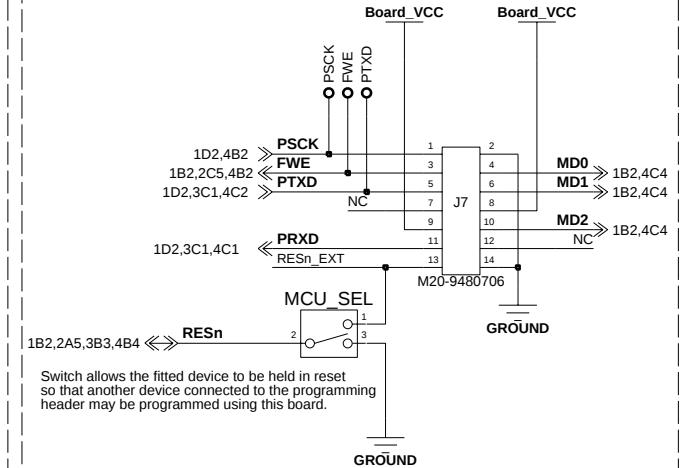
GENERIC HEADERS



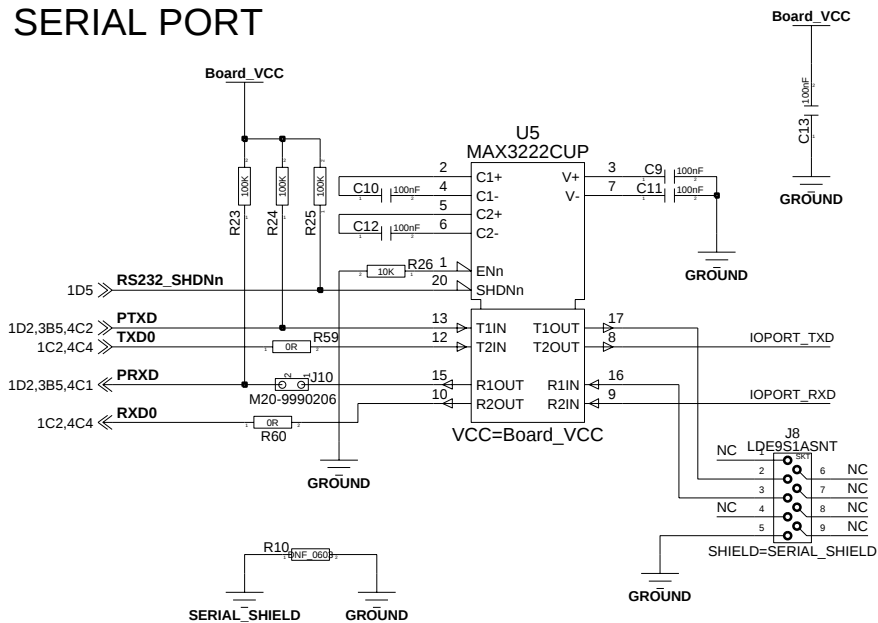
LEDs



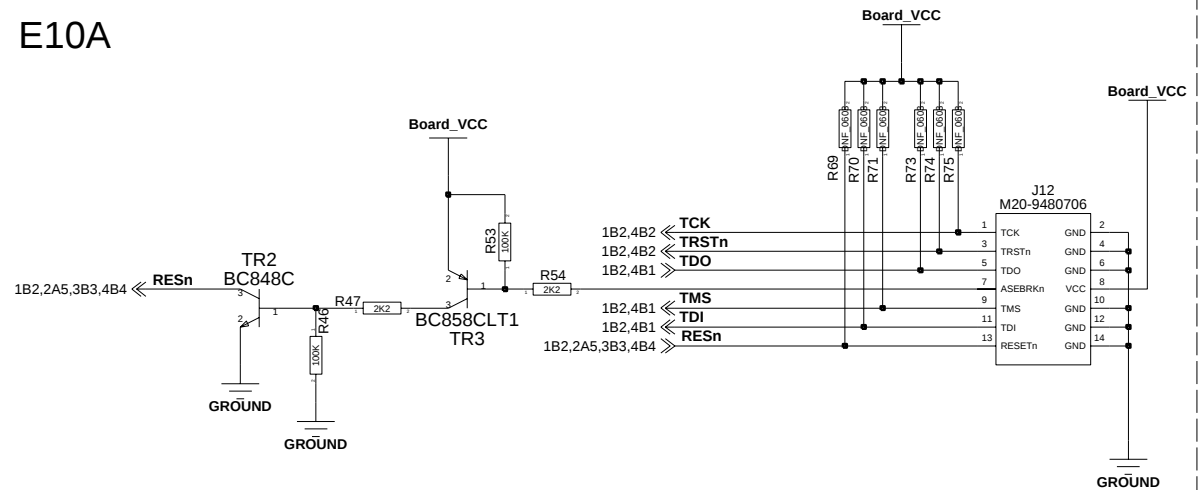
FLASH PROGRAMMING



SERIAL PORT



E10A



SIZE A4

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SCHEMATIC TITLE

3DK2218

SHEET TITLE

**Generic & Flash Connector
LEDs & Serial Port**

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D.Fife

DATE	15-06-04
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REV	2
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DRAWING NUMBER
D005312_04

PAGE
3/5

