

Overview

5000FP-DK is a front panel especially designed to be used in high range piano applications. However, thanks to its versatile interface, it can be also used in other applications like Drums modules or Effect devices.

5000FP-DK hardware includes:

- 21 x tact switches
- 21 x LEDs
- 1 x low cost COG LCD Graphic display 128*64: NEWHAVEN NHD-C12864LZ-FBW-3.3

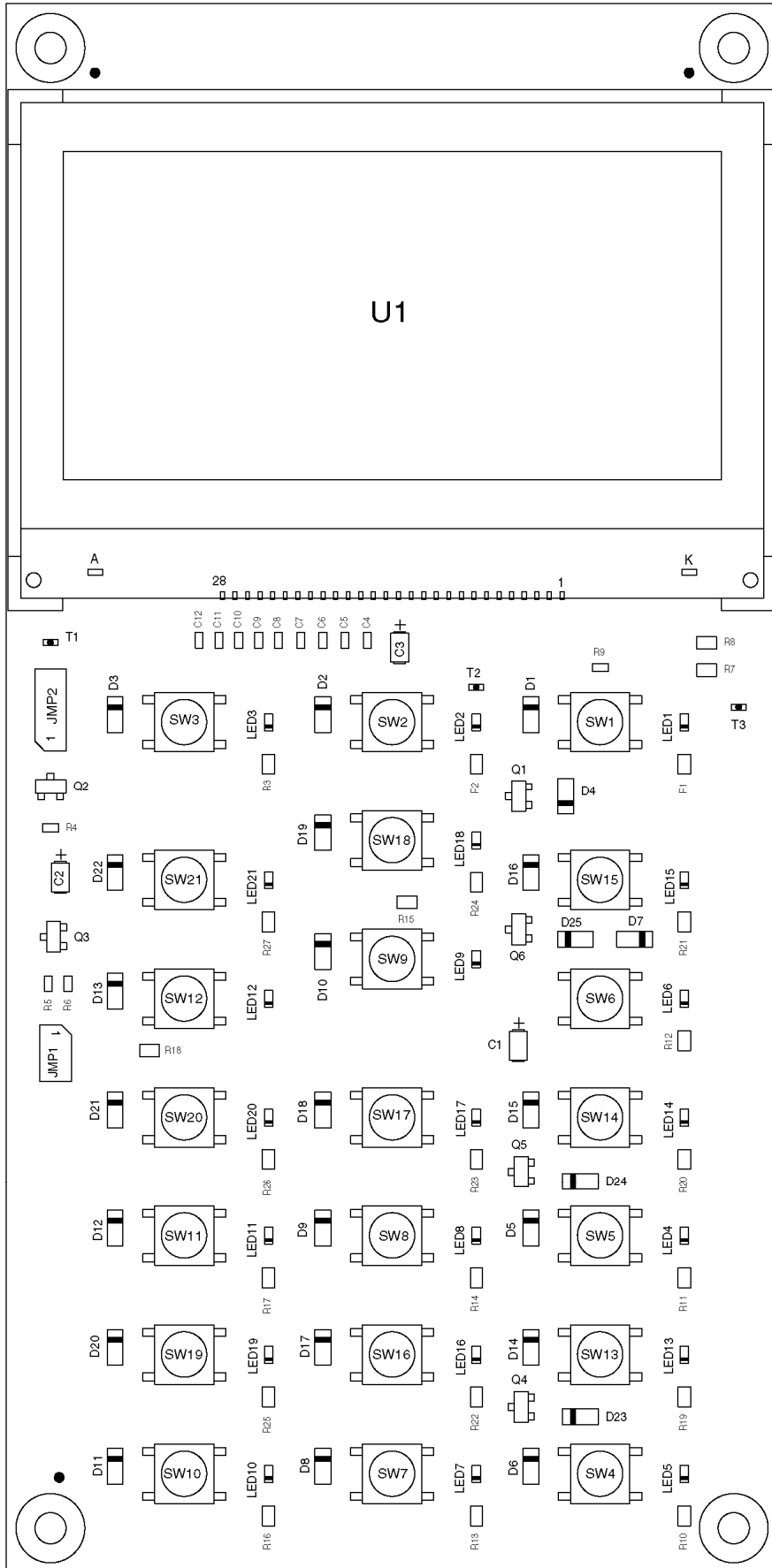
Connectors Configuration

Name	Reference	Type	Description
SWITCHES & LEDES	J1	HE10 - 2*10	Switches and LEDs matrix. Should be linked to dedicated connector of main board: <ul style="list-style-type: none"> • J21 on 5916PIA-DK • J24 on 5808-DK
GRAPHIC LCD	J2	JST XH Series,1*10	Connection to Graphic LCD (serial interface + PWM for backlight). Should be linked to dedicated connector of main board: <ul style="list-style-type: none"> • J6 on 5916PIA-DK • J6 on 5808-DK

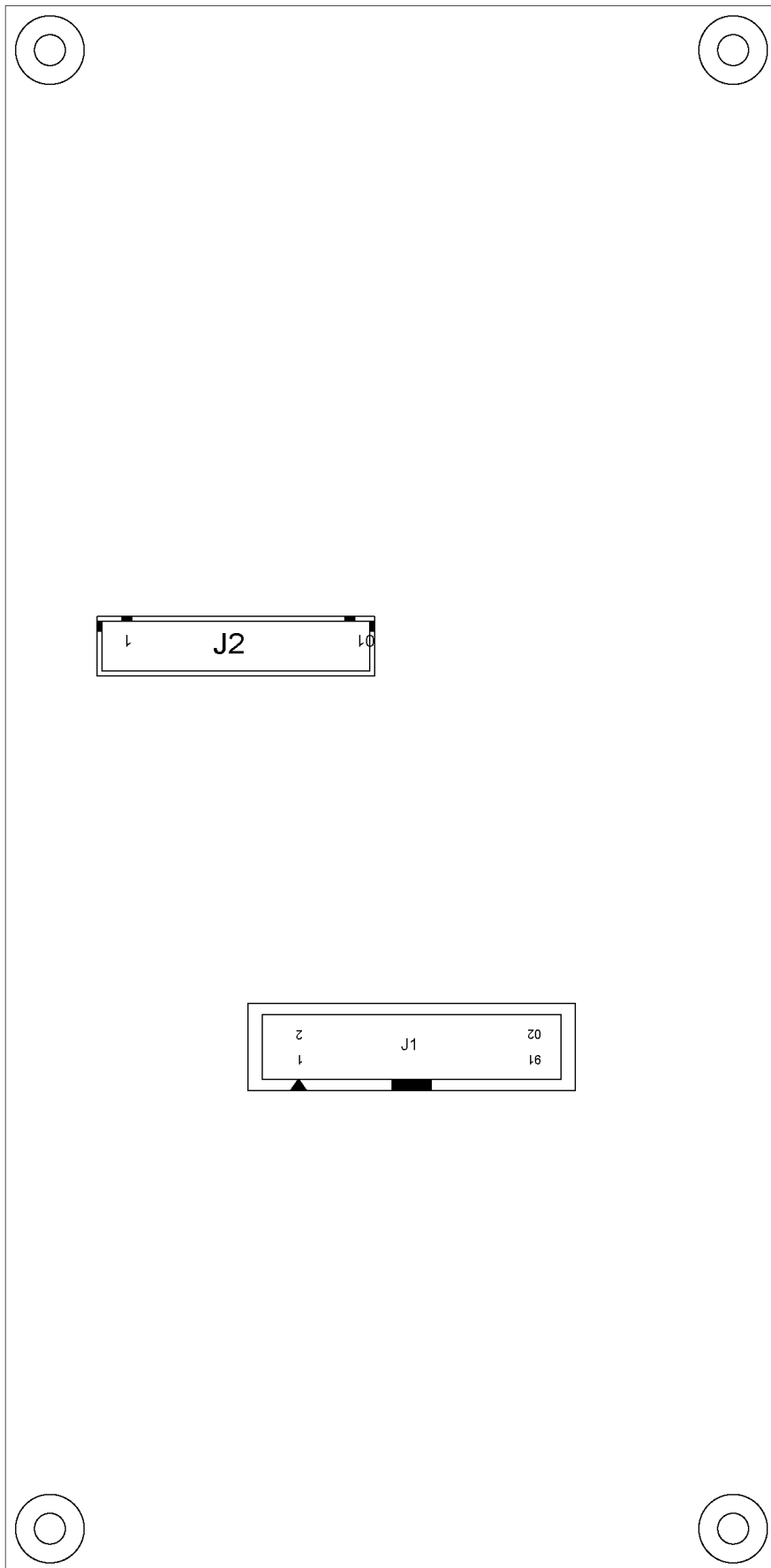
Jumper Configuration

Reference	Default Setting	Description
JMP1	Closed	Connect PWM signal to display backlight.
JMP2	1-2	Source for display backlight <ul style="list-style-type: none"> • 1-2: +5V PWM. • 2-3: +5V DC.

Layout – Top side



Layout - Bottom side



Bill of Material

FRONT PANEL - DIGITAL PIANO & OTHERS Revised: November 13, 2014

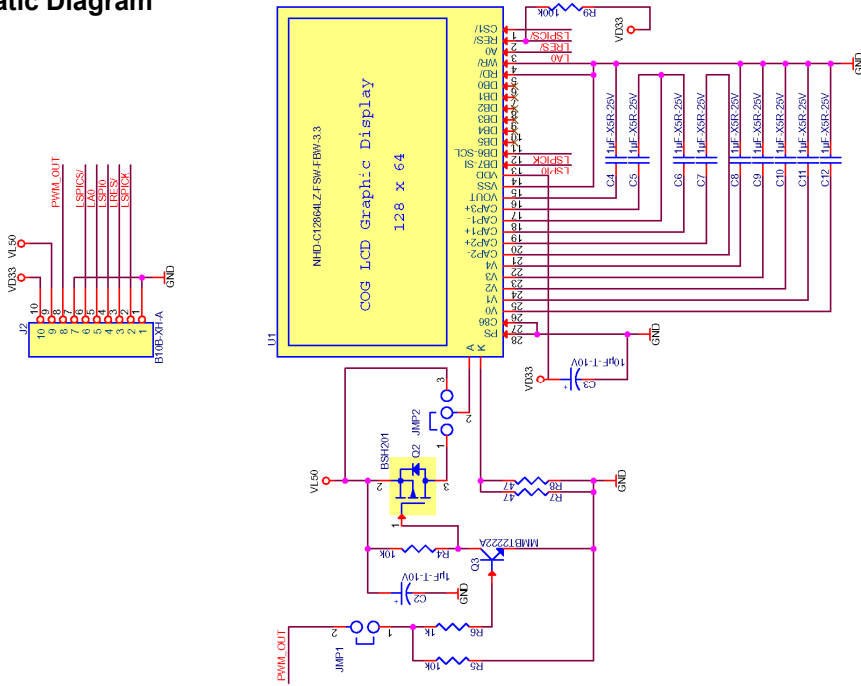
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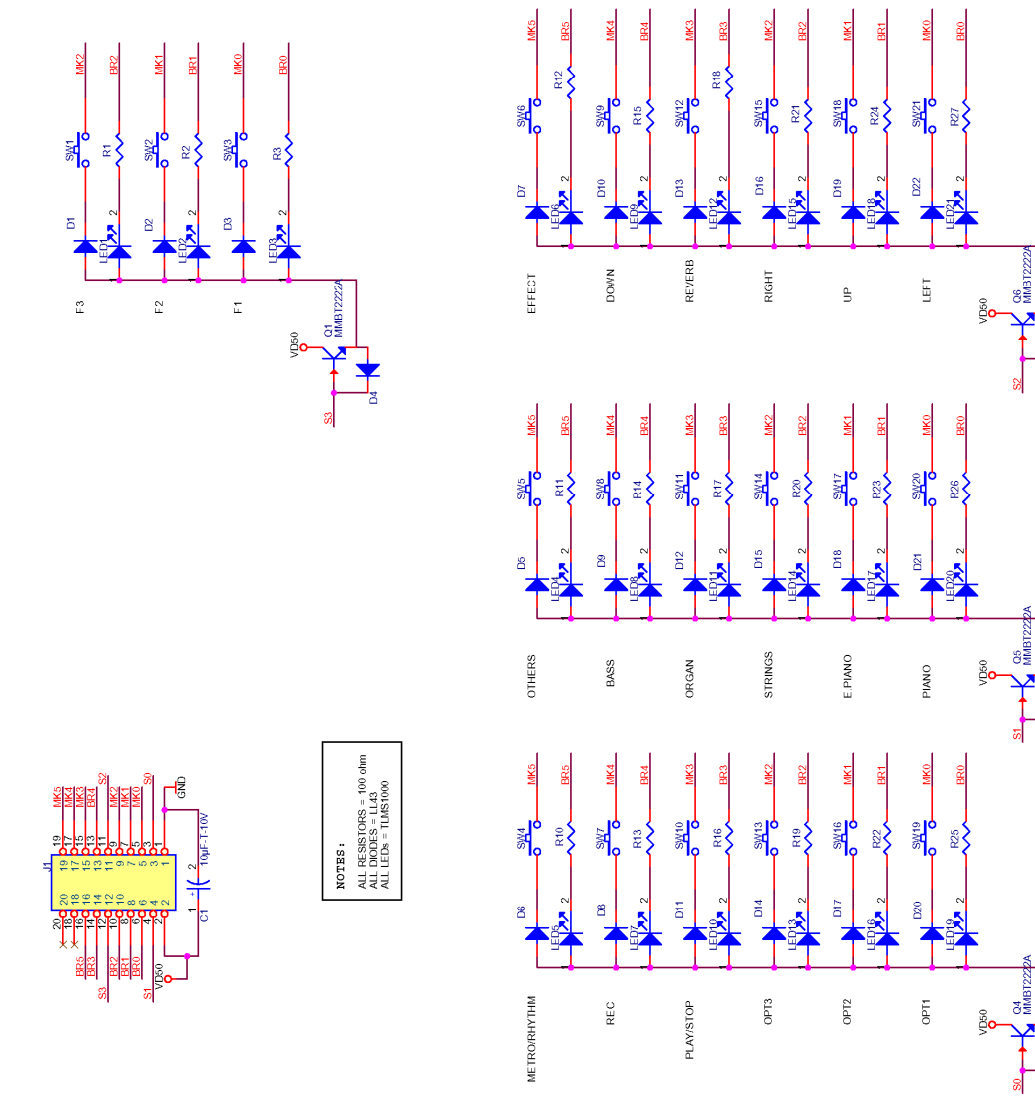
Item	Quantity	Reference	Part	Manufacturer	Designation
1	2	C1, C3	10 μ F-T-10V		
2	1	C2	1 μ F-T-10V		
3	9	C4, C5, C6, C7, C8, C9, C10, C11, C12	1 μ F-X5R-25V		
4	25	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25	LL43		
5	1	JMP1	Jumper1P	Generic	BA25-Male-7mm-Gold
6	1	JMP2	Jumper2P	Generic	BA25-Male-7mm-Gold
7	1	J1	HEAD_10X2		
8	1	J2	B10B-XH-A	JST	B10B-XH-A
9	21	LED1, LED2, LED3, LED4, LED5, LED6, LED7, LED8, LED9, LED10, LED11, LED12, LED13, LED14, LED15, LED16, LED17, LED18, LED19, LED20, LED21	TLMS1000-Vishay	VISHAY	TLMS1000-GS08
10	5	Q1, Q3, Q4, Q5, Q6	MMBT2222A		
11	1	Q2	BSH201		
12	21	R1, R2, R3, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27	100		
13	2	R4, R5	10k		
14	1	R6	1k		
15	2	R7, R8	47		
16	1	R9	100k		
17	21	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15, SW16, SW17, SW18, SW19, SW20, SW21	DTSM-6	APEM	DTSM-61N
18	3	T1, T2, T3	TestPoint	Vogt	N.M. (985.62 or 1000C.22)
19	1	U1	NHD-C12864LZ-FSW-FBW-3.3	NEWHAVEN	NHD-C12864LZ-FSW-FBW-3.3

Schematic Diagram

GRAPHIC LCD



SWITCHES & LEDES



NOTES :
 ALL RESISTORS = 100 ohm
 ALL DIODES = 1N43
 ALL LEDES = TLDS1060

DREAM S.A. CONFIDENTIAL DATA			
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