

HI-FRC 4KN

Approval

Rev. 0




Issue Date.

2020. 02. 19

Doc No.

HI-FRC 4KN_01

Note | Specification is subject to change without notice.
Consequently it is better to contact to our company before proceeding with the design of your product incorporating this board

Prepared	Checked I	CheckedII	Approved
			
			YH. HAN

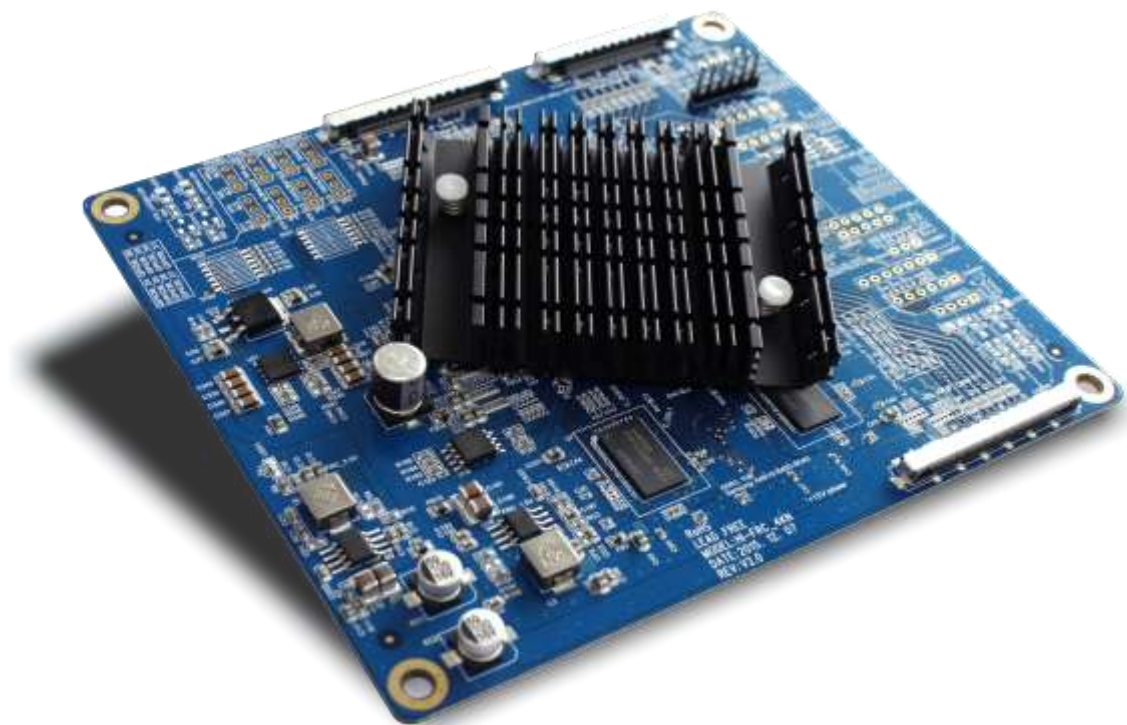
HI-FRC 4KN

Revision History

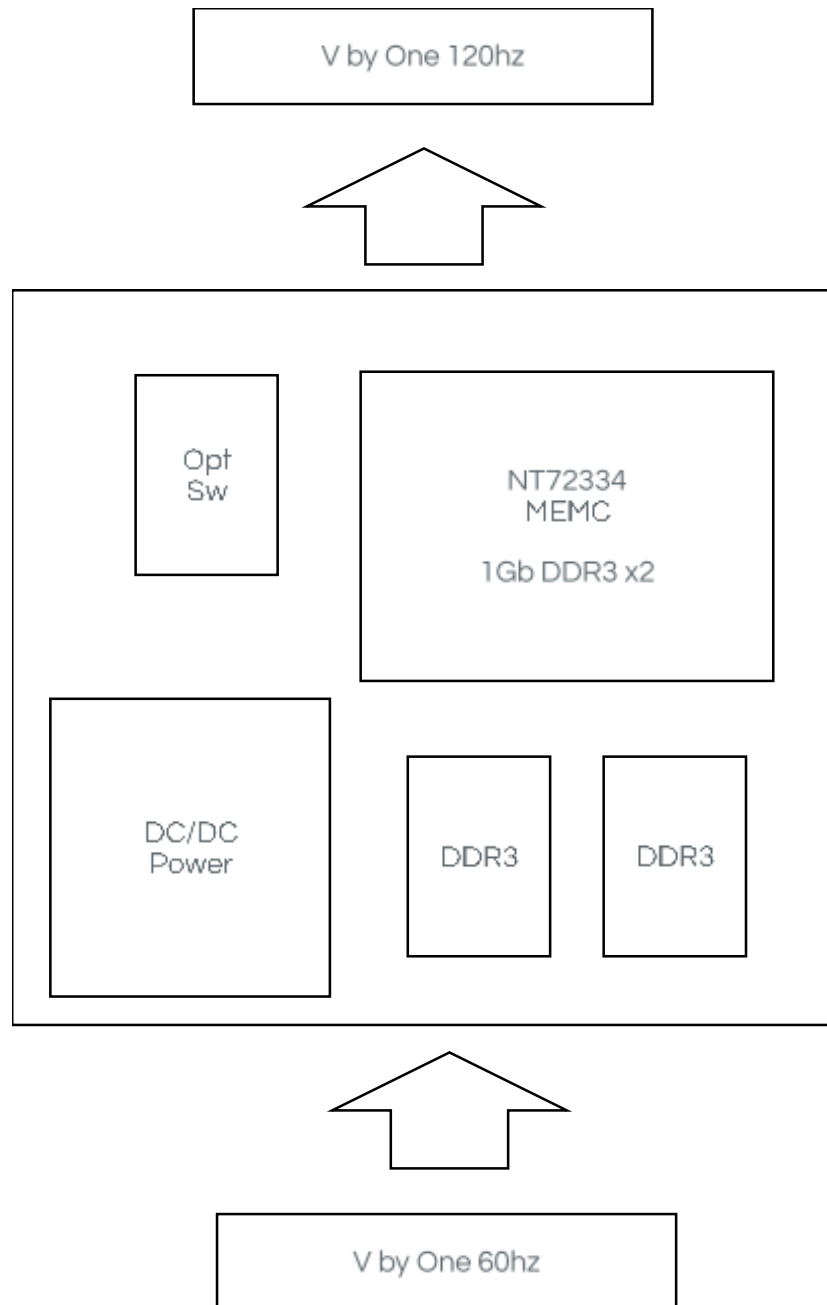
Rev.	ECN No.	Description of Changes	Date	Prepared
0		Initial Release	2020.02.19	YH.HAN

1. General Specification

No.	Item	Description		
1	Model Name	HI-FRC 4KN (NOVATEK NT72334TBG)		
2	LCD Module	V by One 120hz – 4K2K		
3	Input	V by One 60hz		
4	Power Consumption	Supply Voltage	12Vdc	
		Power	-	Board Only
5	Signal Connector	V by One out	3840x2160 120hz (51p, 41p)	
		V by One in	3840x2160 60hz (51p)	
6	Board Size	W x H x D(mm)	135 x 115 x 12	



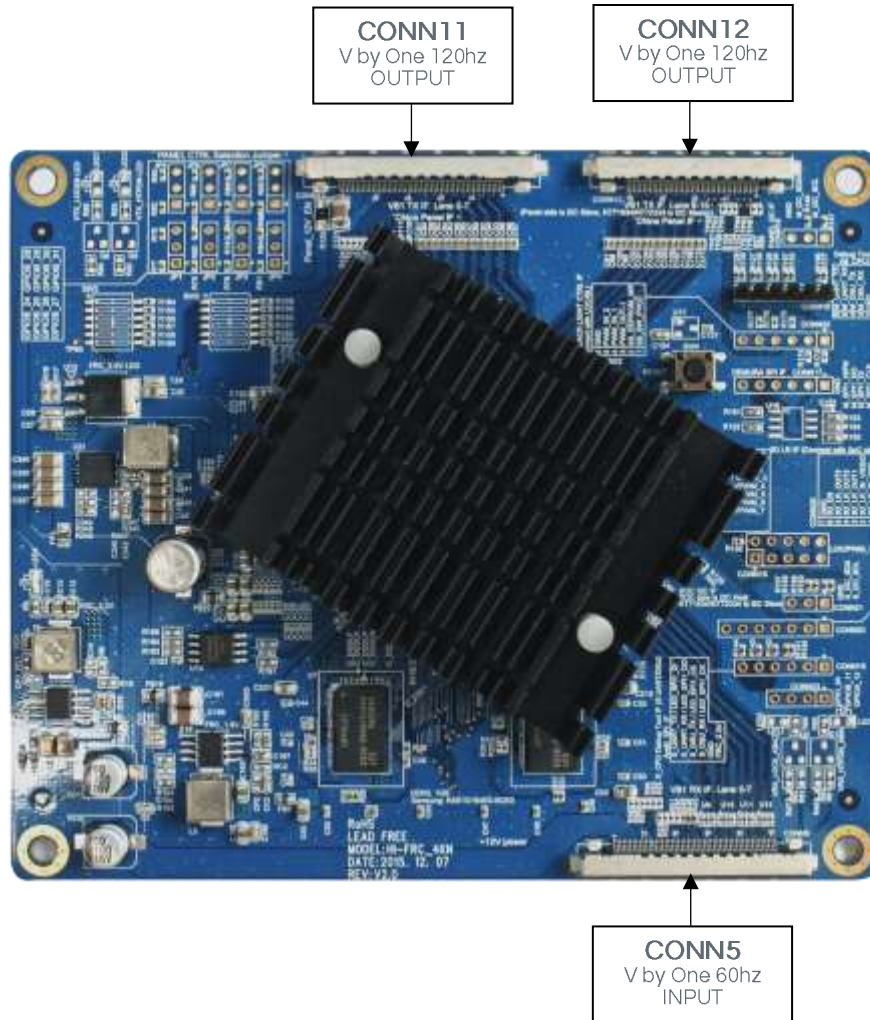
2. FUNCTIONAL BLOCK DIAGRAM



HI-FRC 4KN

3. CONNECTOR, PINOUT & JUMPERS

The various connectors are:



Summary:

Reference	Item	Description	Type	Manufacture
CONN11	Connector	V by One 120hz output	TF05-51S-0.5SH	-
CONN12	Connector	V by One 120hz output	TF05-41S-0.5SH	-
CONN5	Connector	V by One 60hz input	TF05-51S-0.5SH	-

CONN5: V BY ONE Connector (51p) Input

Pin No.	Symbol	Description
51	GND	Ground
50	VBY7P	V BY ONE 7 +
49	VBY7N	V BY ONE 7 -
48	GND	Ground
47	VBY6P	V BY ONE 6 +
46	VBY6N	V BY ONE 6 -
45	GND	Ground
44	VBY5P	V BY ONE 5 +
43	VBY5N	V BY ONE 5 -
42	GND	Ground
41	VBY4P	V BY ONE 4 +
40	VBY4N	V BY ONE 4 -
39	GND	Ground
38	VBY3P	V BY ONE 3 +
37	VBY3N	V BY ONE 3 -
36	GND	Ground
35	VBY2P	V BY ONE 2 +
34	VBY2N	V BY ONE 2 -
33	GND	Ground
32	VBY1P	V BY ONE 1 +
31	VBY1N	V BY ONE 1 -
30	GND	Ground
29	VBY0P	V BY ONE 0 +
28	VBY0N	V BY ONE 0 -
27	GND	Ground
26	LOCKN TX	Lock detect
25	HTPDN TX	Hot plug detect
24	GND	Ground
23	AGP or NSB	H or NC=AGP, L=NSB(No signal Black) (OPT)
22	L-DIM Enable	H=Enable, L or NC=Disable (OPT)
21	Bit SEL	H or NC=10bit, L=8bit
20	N.C	No Connection
19	N.C	No Connection
18	N.C	No Connection
17	N.C	No Connection
16	D_FOMAT1	INPUT DATA FORMAT [1:0] 00=MODE1, 01=MODE2, 10=MODE3, 11=MODE4
15	D_FOMAT0	
14	GND	Ground
12,13	GND	Ground
10,11	GND	Ground
9	PANEL VCC / NC	Opt
7,8	PANEL VCC / NC	Opt
5,6	PANEL VCC / NC	Opt
3,4	PANEL VCC / NC	Opt
1,2	PANEL VCC / NC	Opt

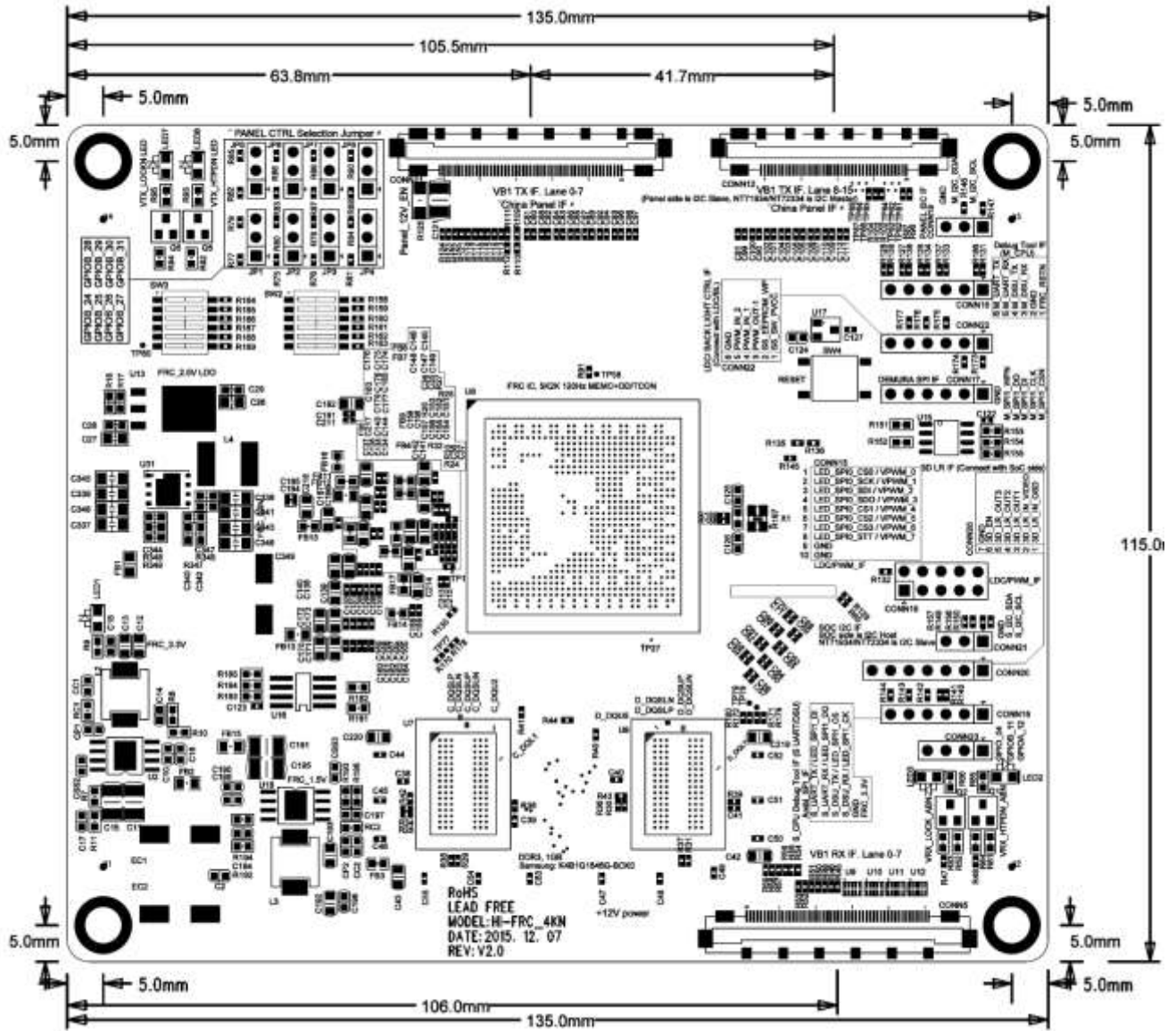
CONN12: V BY ONE Connector (41p) Output

Pin No.	Symbol	Description
1,2	N.C	No Connection
3,4	N.C	No Connection
5,6	N.C	No Connection
7,8	N.C	No Connection
9,10	N.C	No Connection
11,12	N.C	No Connection
13,14	N.C	No Connection
15,16	N.C	No Connection
17	GND	Ground
18	VBY15P	V BY ONE 15 +
19	VBY15N	V BY ONE 15 -
20	GND	Ground
21	VBY14P	V BY ONE 14 +
22	VBY14N	V BY ONE 14 -
23	GND	Ground
24	VBY13P	V BY ONE 13 +
25	VBY13N	V BY ONE 13 -
26	GND	Ground
27	VBY12P	V BY ONE 12 +
28	VBY12N	V BY ONE 12 -
29	GND	Ground
30	VBY11P	V BY ONE 11 +
31	VBY11N	V BY ONE 11 -
32	GND	Ground
33	VBY10P	V BY ONE 10 +
34	VBY10N	V BY ONE 10 -
35	GND	Ground
36	VBY9P	V BY ONE 9 +
37	VBY9N	V BY ONE 9 -
38	GND	Ground
39	VBY8P	V BY ONE 8 +
40	VBY8N	V BY ONE 8 -
41	GND	Ground

CONN11: V BY ONE Connector (51p) Output

Pin No.	Symbol	Description
1	GND	Ground
2	VBY7P	V BY ONE 7 +
3	VBY7N	V BY ONE 7 -
4	GND	Ground
5	VBY6P	V BY ONE 6 +
6	VBY6N	V BY ONE 6 -
7	GND	Ground
8	VBY5P	V BY ONE 5 +
9	VBY5N	V BY ONE 5 -
10	GND	Ground
11	VBY4P	V BY ONE 4 +
12	VBY4N	V BY ONE 4 -
13	GND	Ground
14	VBY3P	V BY ONE 3 +
15	VBY3N	V BY ONE 3 -
16	GND	Ground
17	VBY2P	V BY ONE 2 +
18	VBY2N	V BY ONE 2 -
19	GND	Ground
20	VBY1P	V BY ONE 1 +
21	VBY1N	V BY ONE 1 -
22	GND	Ground
23	VBY0P	V BY ONE 0 +
24	VBY0N	V BY ONE 0 -
25	GND	Ground
26	LOCKN RX	Lock detect
27	HTPDN RX	Hot plug detect
28,29	GND	Ground
30,40	N.C	No Connection
41,42	GND	Ground
43	N.C	No Connection
44,45	PANEL VCC / NC	Opt
46,47	PANEL VCC / NC	Opt
48,49	PANEL VCC / NC	Opt
50,51	PANEL VCC / NC	Opt

4. CONTROLLER DIMENSIONS



[DIMENSION DOWNLOAD](#)