

FRC BOARD

Specifications

HI-FRC 4KN




Approval

Rev. 0

Issue Date. 2015. 12. 23

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

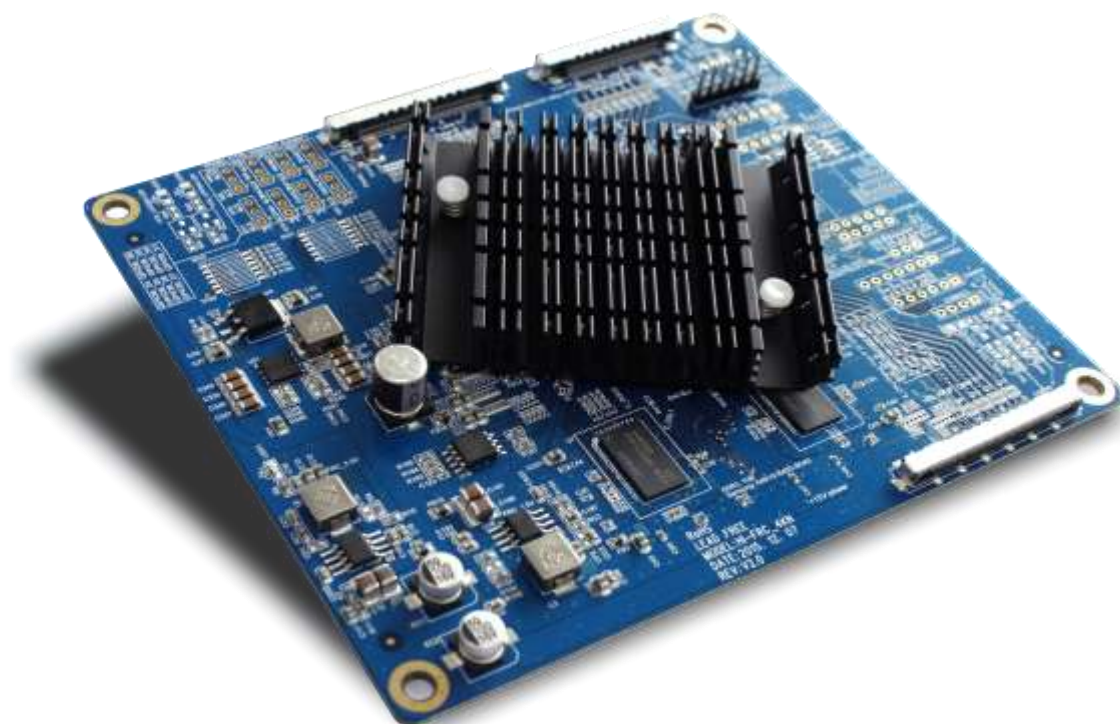
Prepared	Checked I	CheckedII	Approved
			
			YH. HAN

Revision History

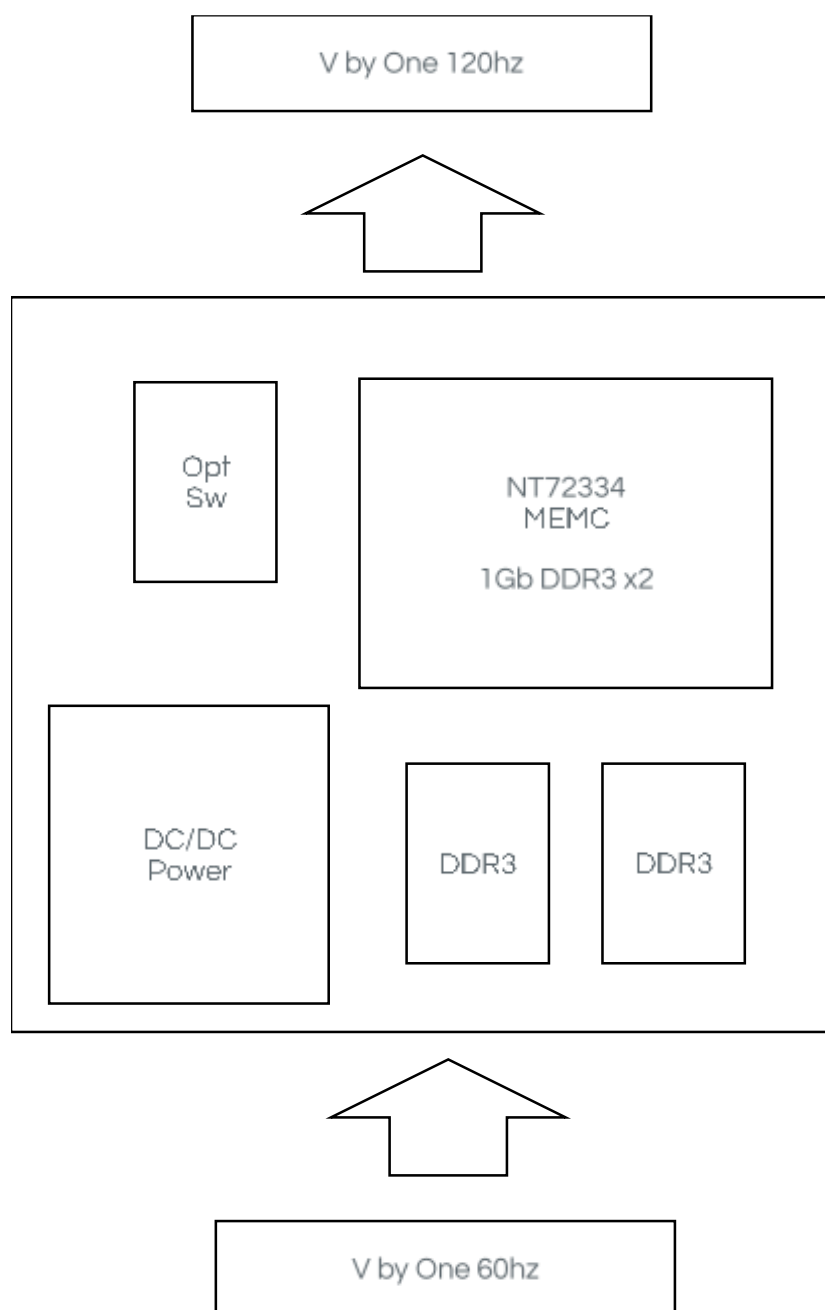
Rev.	ECN No.	Description of Changes	Date	Prepared
0		Initial Release	2015. 12. 23	YH. HAN

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	Board Only
		Power	-	
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



3. CONNECTOR, PINOUT & JUMPERS

The various connectors are:

CONN11
V by One 120hz
OUTPUT

CONN12
V by One 120hz
OUTPUT



CONN5
V by One 60hz
OUTPUT

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) Output

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
41,40	N.C	No Connection
39,38	N.C	No Connection
37,36	N.C	No Connection
35,34	N.C	No Connection
33,32	N.C	No Connection
31,30	N.C	No Connection
29,28	N.C	No Connection
27,26	N.C	No Connection
25	GND	Ground
24	VBYP15P	V BY ONE 15 +
23	VBYP15N	V BY ONE 15 -
22	GND	Ground
21	VBYP14P	V BY ONE 14 +
20	VBYP14N	V BY ONE 14 -
19	GND	Ground
18	VBYP13P	V BY ONE 13 +
17	VBYP13N	V BY ONE 13 -
16	GND	Ground
15	VBYP12P	V BY ONE 12 +
14	VBYP12N	V BY ONE 12 -
13	GND	Ground
12	VBYP11P	V BY ONE 11 +
11	VBYP11N	V BY ONE 11 -
10	GND	Ground
9	VBYP10P	V BY ONE 10 +
8	VBYP10N	V BY ONE 10 -
7	GND	Ground
6	VBYP9P	V BY ONE 9 +
5	VBYP9N	V BY ONE 9 -
4	GND	Ground
3	VBYP8P	V BY ONE 8 +
2	VBYP8N	V BY ONE 8 -
1	GND	Ground

CON11: 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 RX	Lock detect
25	HTPDN RX	Hot plug detect
23,24	GND	Ground
12,22	N.C	No Connection
10,11	GND	Ground
9	N.C	No Connection
7,8	Main Power Input	12V Power
5,6	Main Power Input	12V Power
3,4	Main Power Input	12V Power
1,2	Main Power Input	12V Power

4. CONTROLLER DIMENSIONS

