Product Spec

Motherboard

RB-F211 V1.0

Prepared by： TONY Date： 2018/04/19

Approved by： PETER Date： 2018/04/19

Revision History			
Revision	**Date**	**Description**	**Author**
V1.0	2018/04/19	First release	TONY

RB-F211

REALBOM

Features

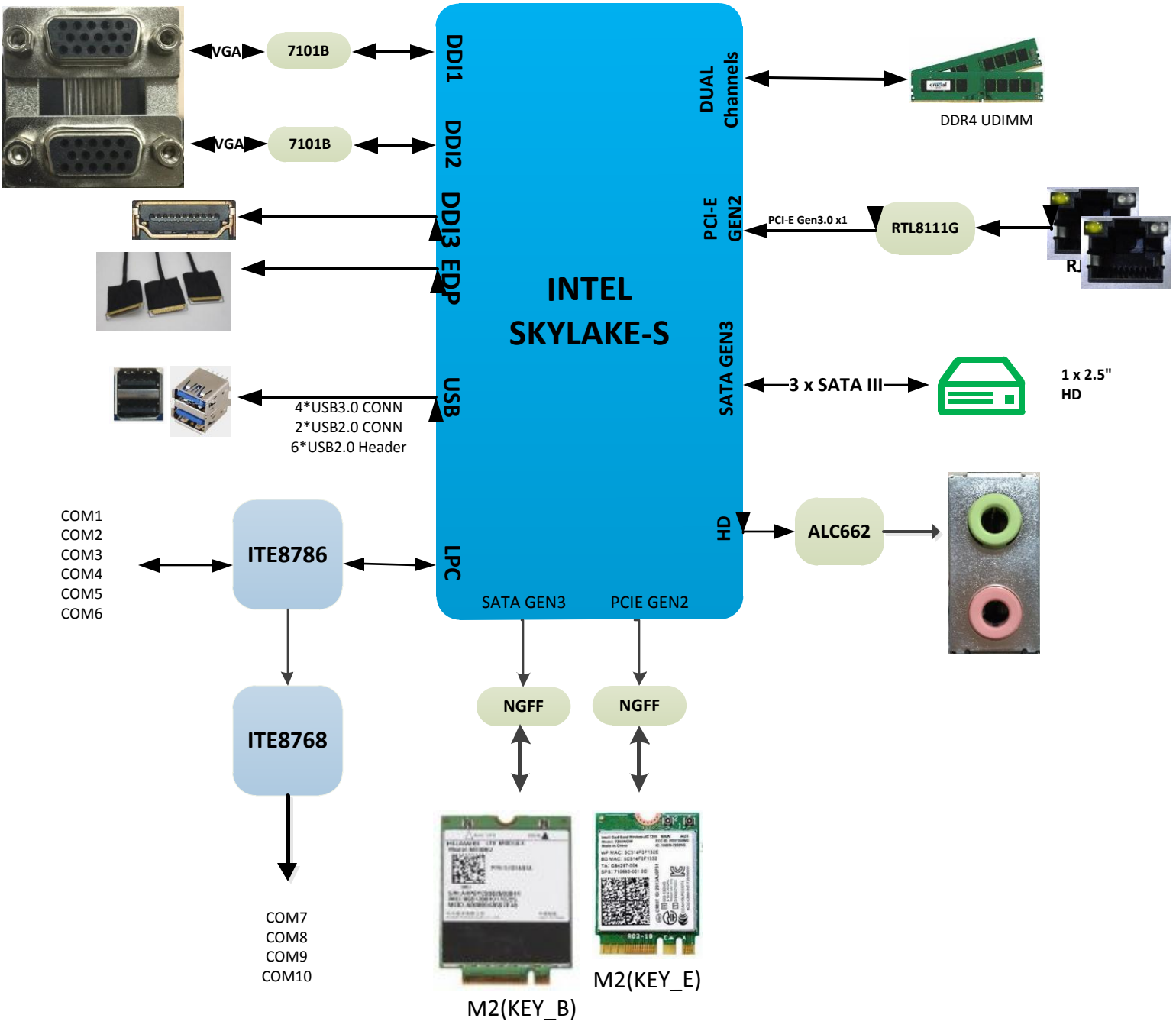
*Intel Skylake LGA1151 Platform, H110 PCH
*Supports 4 Display;2xVGA+1xHDMI+1xEDP
*Supports 2 X 10/100/1000M LAN adapter
*Supports 4 X USB3.0, 8 X USB2.0
*Supports 10 X COMs, 3 X SATAIII, 1 X 4G , 1 X WIFI ,
*Supports HD Audio , 1 X Line out,1 X MIC IN
*TWO 288-pin UDIMM up to 32GB, DDR4 1866/2133

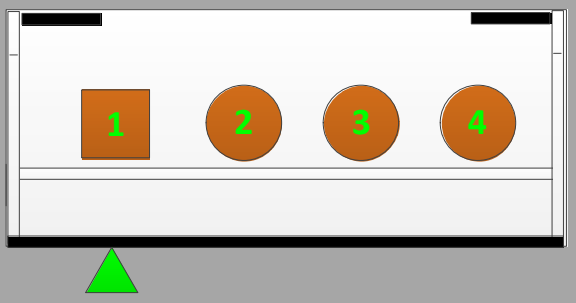
Application Industry

POS industry.Traffic industry, Advertising Machine,Financial industry,

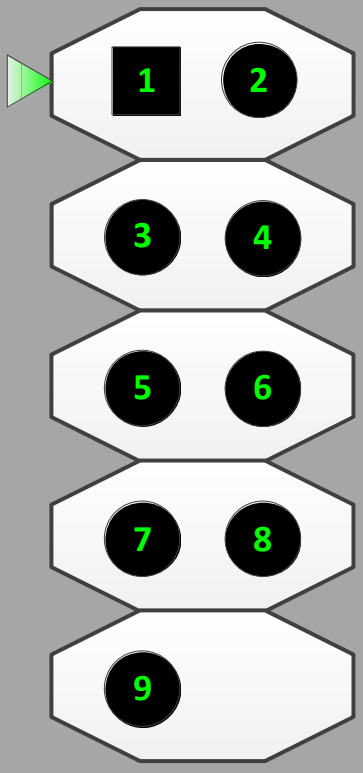
Specifications

Memory	Type	UDIMM DDR4 No ECC 、Support up to 2133MT/s
	Channel	DUAL
	Max Memory Size	32G
Graphics	Displays	4 Display (2*VGA + 1*HDMI+1*EDP)
Audio	ALC662 HD Audio	X2 Audio line out,x2 Audio Mic in
Ethernet	RTL8111F	x2 10/100/1000M BASET LAN
Internal Connector	FAN	1*CPU_FAN+1*SYS_FAN
	AUDIO	1*2x5 Header 1*Line out+1*MIC IN
	WIFI	x1 M.2 KEY_E connector(2230)
	COM	X2 2x18 Header Box;COM3/4/5/6/7/8/9/10(完整信号)
	EDP	X1 2X8 Header BOX
	USB	X3 2X5 PIN Header;
	4G	X1 M.2 KEY_B connector(2242)
	SATAPWR	X1 1X4 PIN wafer
	SATA	X3 标准 7PIN SATA 接口
	PCIE-16X	X1 PCIE-16X connector
	Power	X1 ATX_PWR 2X10PIN + ATX 2X2PIN
	VGA	X1 2X5 PIN Header
I/O	LAN&USB	X2 1000M RJ45+2*USB3.0
	VGA	X2 2*DB15
	HDMI&USB	X1 HDMI+2*USB2.0
	COM	X2 2*DB9
	Aduio	x1 Mic in + Line out
BIOS	Vender	AMI
	ACPI	Supported
Power	POWER Brick	ATX_PWR 2X10PIN + ATX 2X2PIN
Dimensions	PCB	170*170MM

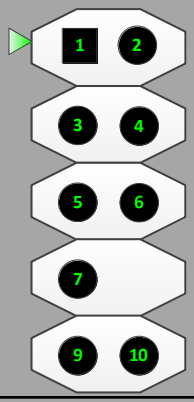

VGA
7101B
VGA
7101B
DDI1
DDI2
DDI3
EDP
USB
LPC
INTEL
SKYLAKE-S
DUAL Channels
DDR4 UDIMM
PCI-E GEN2
PCI-E Gen3.0 x1
RTL8111G
SATA GEN3
3 x SATA III
1 x 2.5" HD
4*USB3.0 CONN
2*USB2.0 CONN
6*USB2.0 Header
HD
ALC662
COM1
COM2
COM3
COM4
COM5
COM6
ITE8786
ITE8768
COM7
COM8
COM9
COM10
SATA GEN3
PCIE GEN2
NGFF
NGFF
M2(KEY_B)
M2(KEY_E)

	SATAPWR
PIN Define	
Type	1X4PIN PH=2.54MM

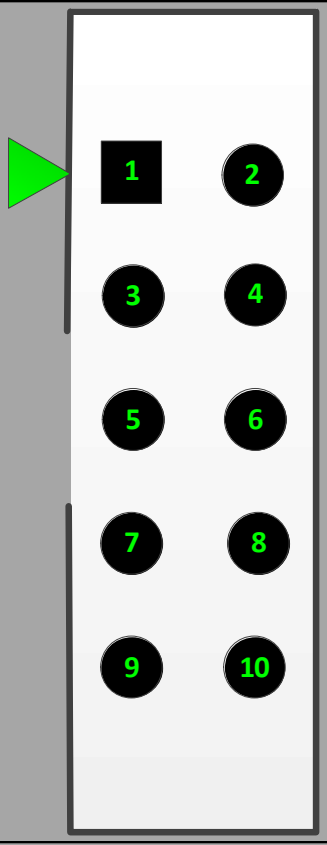
1	12V
2	GND
3	GND
4	5V

	JUSB1/JUSB2/JUSB3
PIN Define	
Type	2X5 PIN PH=2.00MM 缺PIN10

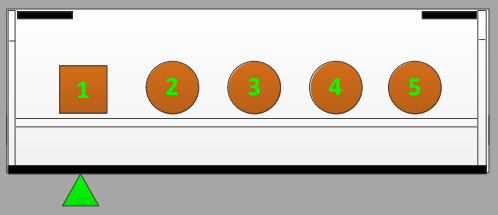
1	5V	2	5V
3	-DATA1	4	-DATA2
5	+DATA1	6	+DATA2
7	GND	8	GND
9	GND		

	F_AUDIO
PIN Define	
Type	2x5 DuPont Header, PH=2.54mm. PIN8 NC
Memo	AUDIO 插针

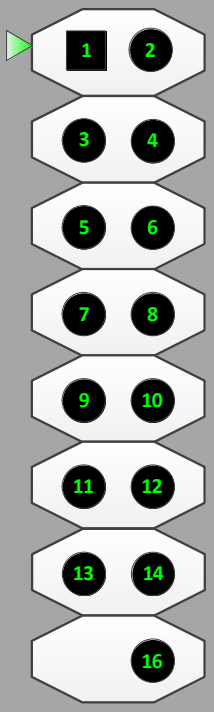
1	MIC2-L	2	AGND
3	MIC2-R	4	3.3V
5	LINE2-R	6	MIC2-JD
7	AGND	8	
9	LINE2-L	10	LINE2-JD

	JVGA
PIN Define	
Type	2X5 Header Box PH=2.0 mm

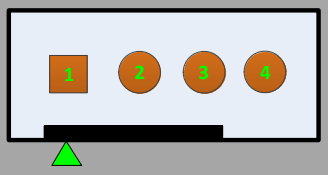
1	GND	2	VGA_SDA
3	ROUT	4	VGA_SCL
5	GOUT	6	VGA_VSYNC
7	BOUT	8	VGA_HSYNC
9	GND	10	5V

	IVCN_eDP
PIN Define	
Type	1X5 Wafer, PH=2.0mm
Memo	IVCN for EDP

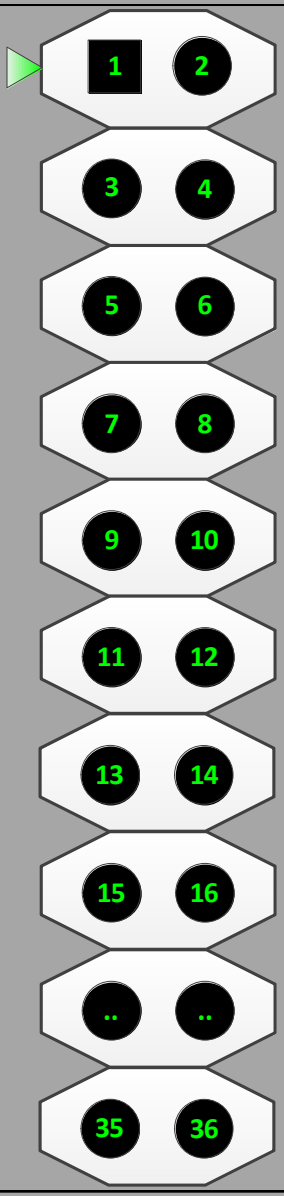
1	+V12S
2	GND
3	BLKT_ON
4	BLKT_PWM
5	+V5S

	EDP
PIN Define	
Type	2x8 DuPont Header, PH=2.0mm
Memo	缺 PIN15

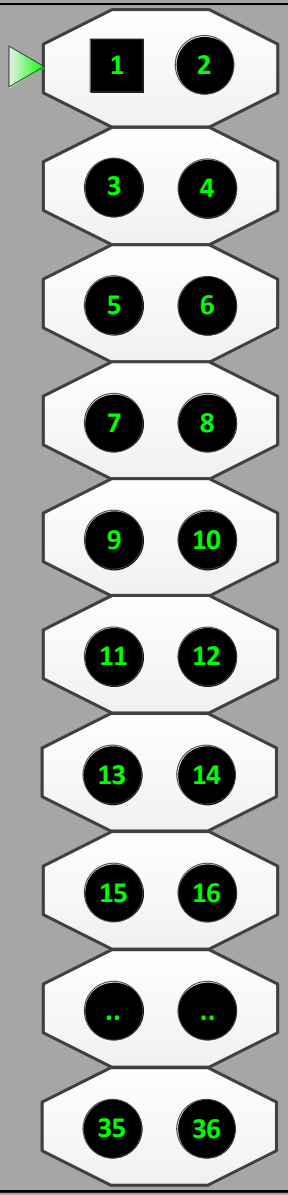
1	3.3V	2	3.3V
3	GND	4	EDP_DET
5	TXP0	6	TXP1
7	TXN0	8	TXN1
9	GND	10	GND
11	AUXP	12	HPD
13	AUXN	14	GND
		16	GND

FAN	SYS_FAN/CPU_FAN
PIN Define	
Type	1X4 FAN Connecter, PH=2.54mm

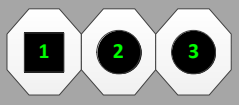
1	GND
2	+V12_FAN
3	FAN_TAC
4	FAN_CTL

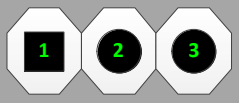
	COM3
PIN Define	
Type	2x18 DuPont Header, PH=2.0mm

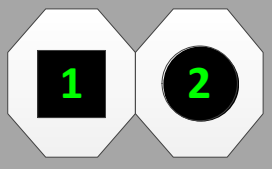
1	DCD3	2	RXD3
3	TXD3	4	DTR3
5	GND	6	DSR3
7	RTS3	8	CTS3
9	RI3	10	DCD4
11	RXD4	12	TXD4
13	DTR4	14	GND
15	DSR4	16	RTS4
17	CTS4	18	RI4
19	DCD5	20	RXD5
21	TXD5	22	DTR5
23	GND	24	DSR5
25	RTS5	26	CTS5
27	RI5	28	DCD6
29	RXD6	30	TXD6
31	DTR6	32	GND
33	DSR6	34	RTS6
35	CTS6	36	RI6

	COM4
PIN Define	
Type	2x18 DuPont Header, PH=2.0mm

1	DCD7	2	RXD7
3	TXD7	4	DTR7
5	GND	6	DSR7
7	RTS7	8	CTS7
9	RI7	10	DCD8
11	RXD8	12	TXD8
13	DTR8	14	GND
15	DSR8	16	RTS8
17	CTS8	18	RI8
19	DCD9	20	RXD9
21	TXD9	22	DTR9
23	GND	24	DSR9
25	RTS9	26	CTS9
27	RI9	28	DCD10
29	RXD10	30	TXD10
31	DTR10	32	GND
33	DSR10	34	RTS10
35	CTS10	36	RI10

	JCMOS
PIN Define	 Pin / 1-2 / 2-3 Define / Normal / Clear Default / 1-2
Type	1x3 DuPont Header PH=2.0mm
Memo	Short 2-3 Clear CMOS

	JME
PIN Define	 Pin / 1-2 / 2-3 Define / Normal / OVERWRITE Default / 1-2
Type	1x3 DuPont Header PH=2.0mm
Memo	Short 2-3 Take ME Flash

	PWR_SW
PIN Define	
Type	1x2 DuPont Header PH=2.0mm
Memo	Short 1-2,Power on