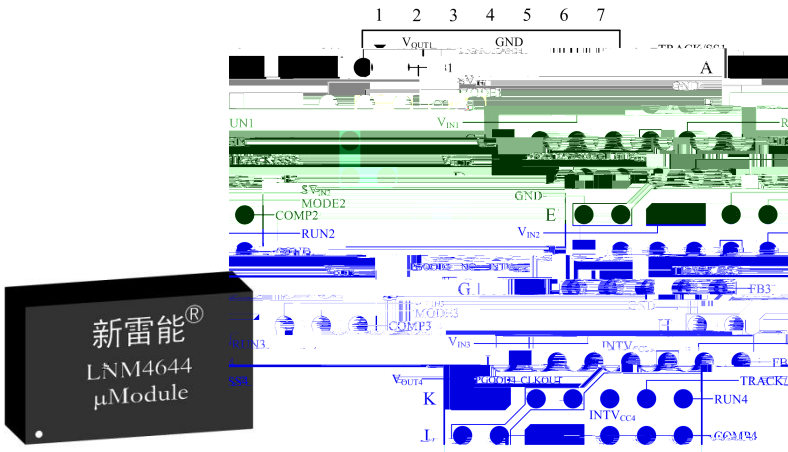
LNM46[illegible] 4V[illegible] 4A DC/[illegible]

- LNM4644 4A DC/DC
- 4V 14V
- 0.6V 5.5V LNM4644 4V
- 4A 14V 0.6V 5.5V
  4A FJ* +e#q
-
- ± 1.5%
-
-
-
- -55 125
- 9mm × 15mm × 5.0mm
  BGA
-
- CPU FPGA
-

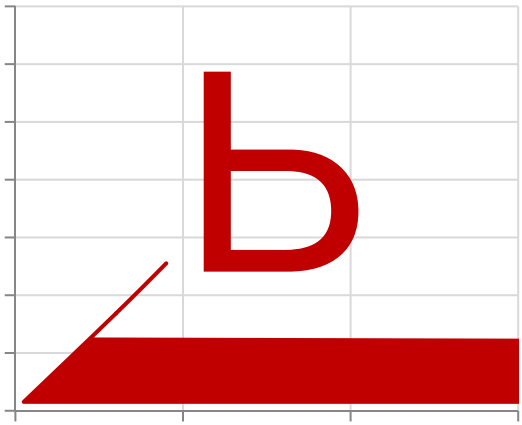


3D

V_{IN}=5V,V_{OUT}=3.3V)

1	V_{IN1} V_{IN2} V_{IN3} V_{IN4}	
2	GND	
3	V_{OUT1} V_{OUT2} V_{OUT3} V_{OUT4}	
4	PGOOD1 PGOOD2 PGOOD3 PGOOD4	FB 0.6V 10%
5	$INTV_{CC1}$, $INTV_{CC2}$ $INTV_{CC3}$ $INTV_{CC4}$	5V
7	SV_{IN1} SV_{IN2} SV_{IN3} SV_{IN4}	
8	TRACK/SS1 TRACK/SS2 TRACK/SS3 TRACK/SS4	
9	RUN1 RUN2, RUN3 RUN4	1.2V 1.1V
10	FB1 FB2 FB3 FB4	0.6V
11	SGND	
12	COMP1 COMP2 COMP3 COMP4	PWM
13	MODE1 MODE2 MDDE3 MODE4	$INTV_{CC}$ CCM DCM
14	CLKOUT	
15	CLKIN	
16	TEMP	

(T_A=25)




CLKIN
PGOOD1
INTVCC1
VOUT1
SVIN1
FB1
VIN1
VIN
INTVCC1
MODE1
TRACK/SS1
RUN1
COMP1
COUT1
INTVCC3
CIN2
VOUT2
COUT2
INTVCC3
VIN
4V TO 14V
CIN3
VOUT3
COUT3
INTVCC4
VIN
4V TO 14V
CIN4
VOUT4
COUT4

LNM4644 4A DC/DC 16A

PWM 0.6V 60.4k

V_{OUT} FB FB SGND R_{FB} :

$$R_{FB} = R1/(V_{OUT}/V_{FB} -1)$$

V_{FB} =0.6V, R1=60.4 kΩ

R_{FB} kΩ

1 R_{FB}

V_{OUT}(V)	0.6	1.0	1.2	1.5	2.5	3.3	5
R_{FB}(kΩ)		90.9	60.4	40.2	19.1	13.3	8.25

LNM4644 MODE $INTV_{CC}$

CCM

CCM Ð א Ð א

:

LNM4644 1MHz MOS

CLKIN

0.3V 2V; 400ns,

(1MHz) ± 30% 700kHz-1.3MHz

LNM4644

LNM4644

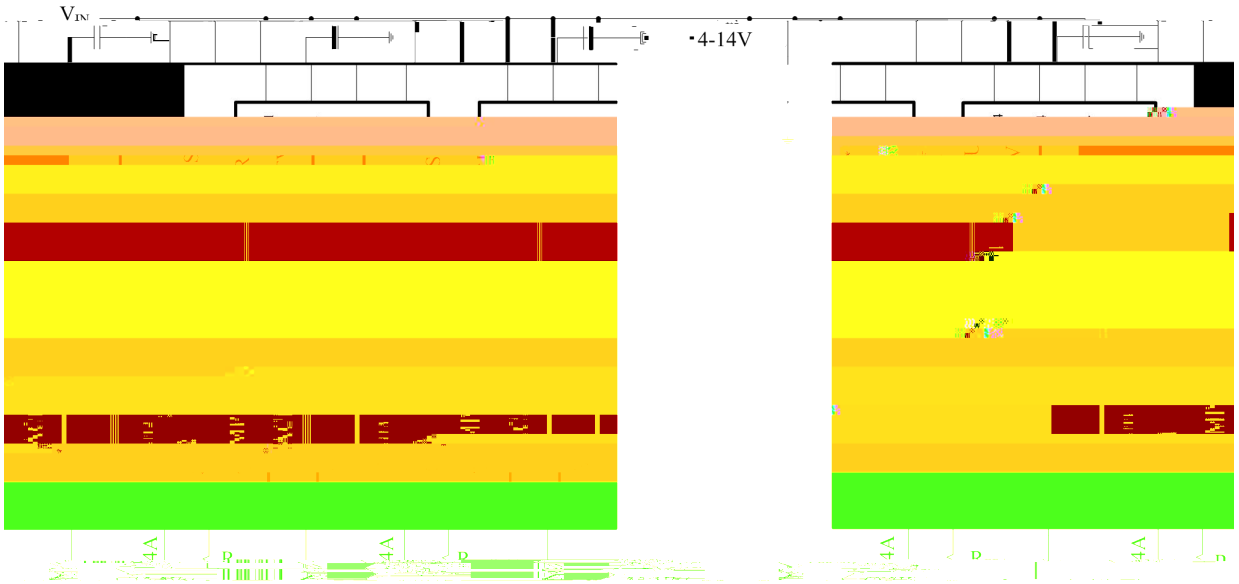
2+2 3+1 4

4 2

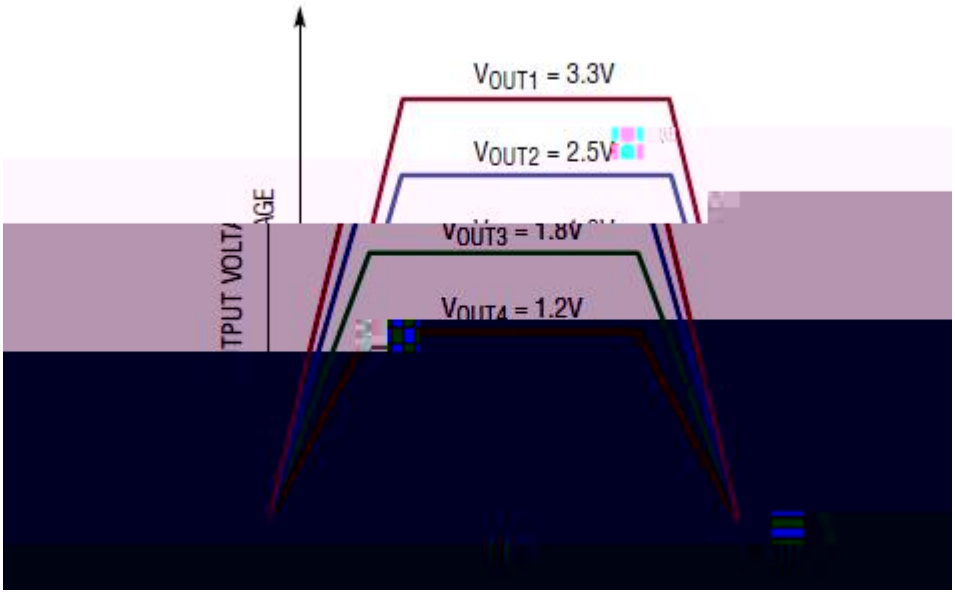
2

	CH1	CH2	CH3	CH4
	180 °			

2+2 4 1 2



3



RUN

RUN

RUN 0.7V ,

RUN 1.2V

LNM4644 150

15

LNM4644 SV_{IN} 2.375V

SV_{IN} V_{IN} MOSFET

4V 14V SV_{IN}

V_{IN} SV_{IN} V_{IN} (1Ω 10Ω)

PCB

(2.375V 4V) LDO 0.1µF SV_{IN}

4V

3

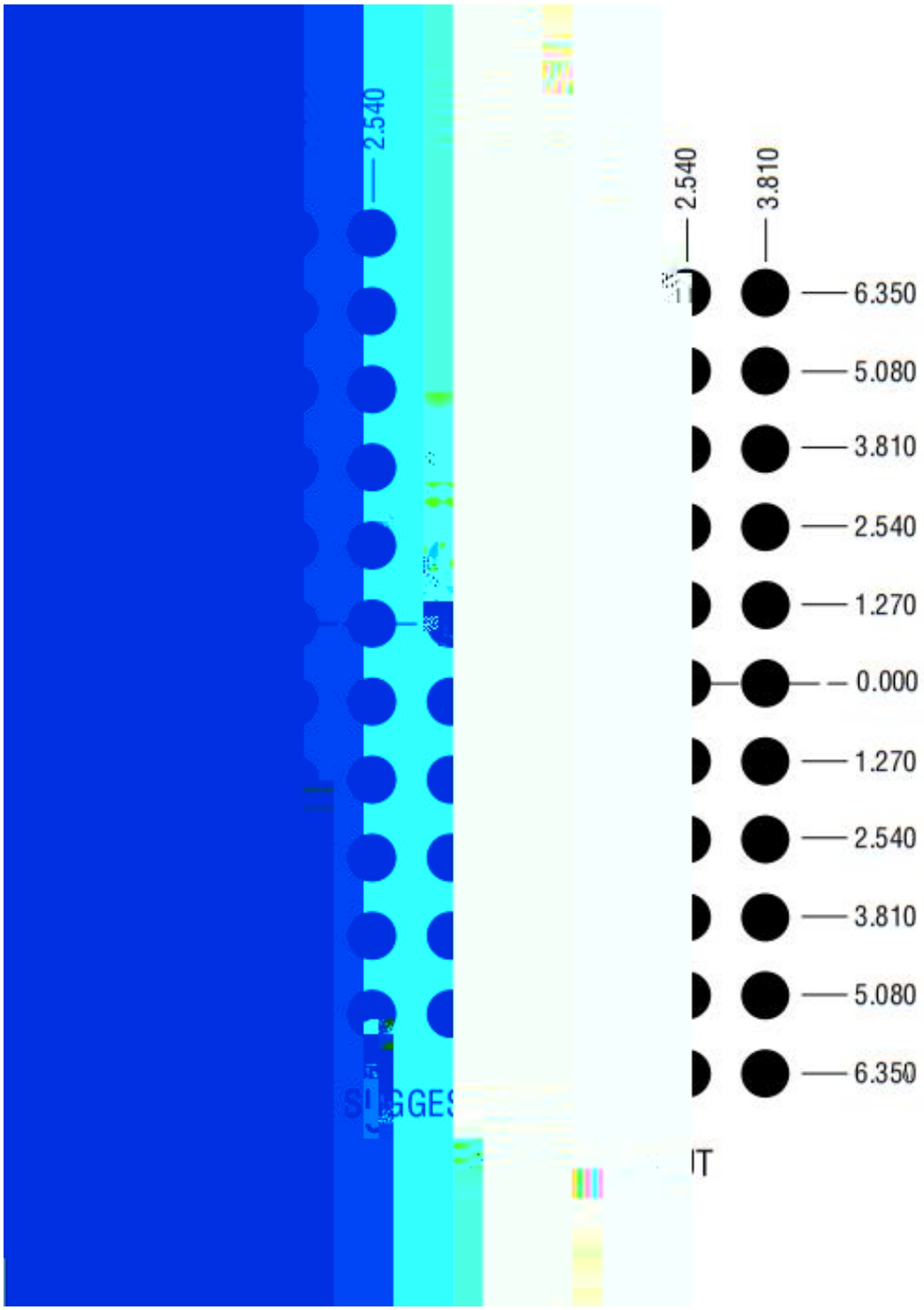
4:



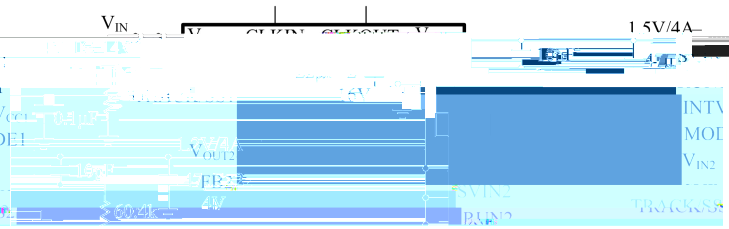
5 LNM4644

7 LNM4644

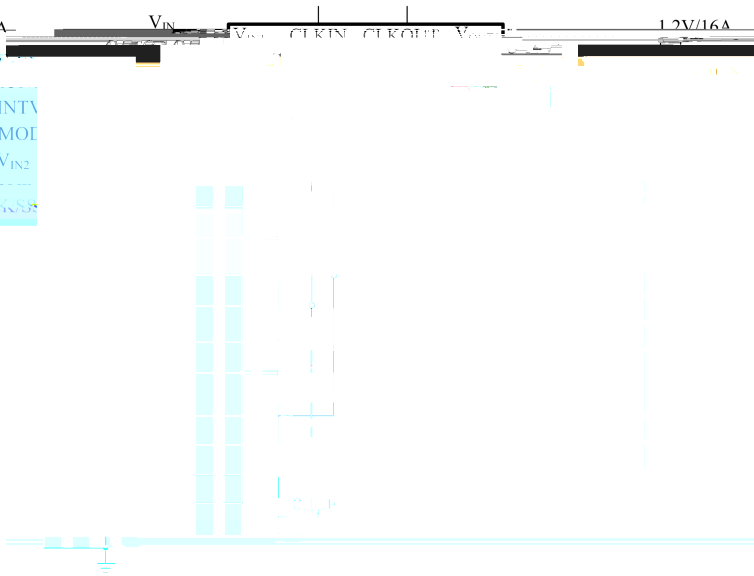
A	4.92	5.0	5.08
D	14.9	15.0	15.1
E	8.9	9.0	9.1
F	---	12.7	---
G	---	7.62	---
e	---	1.27	---
Φb	0.71	0.76	0.81
Φd	0.55	0.63	0.65
F G Φb Φd e		Φb	Φd


2.540
2.540
3.810
6.350
5.080
3.810
2.540
1.270
0.000
1.270
2.540
3.810
5.080
6.350

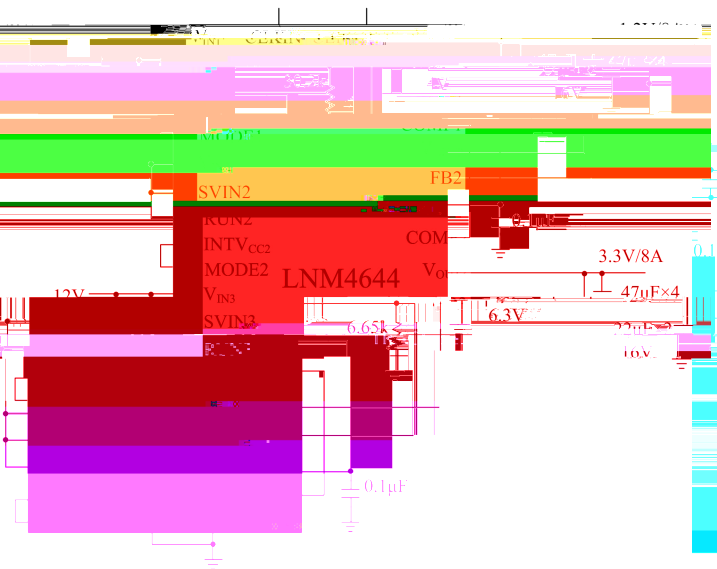
4V-14V 1.2V 1.5V 2.5V 3.3V



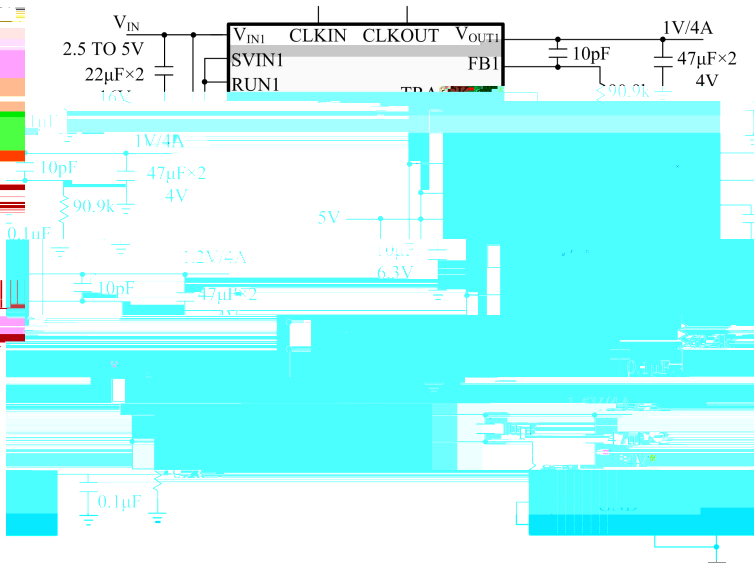
4V-14V 1.2V 16A



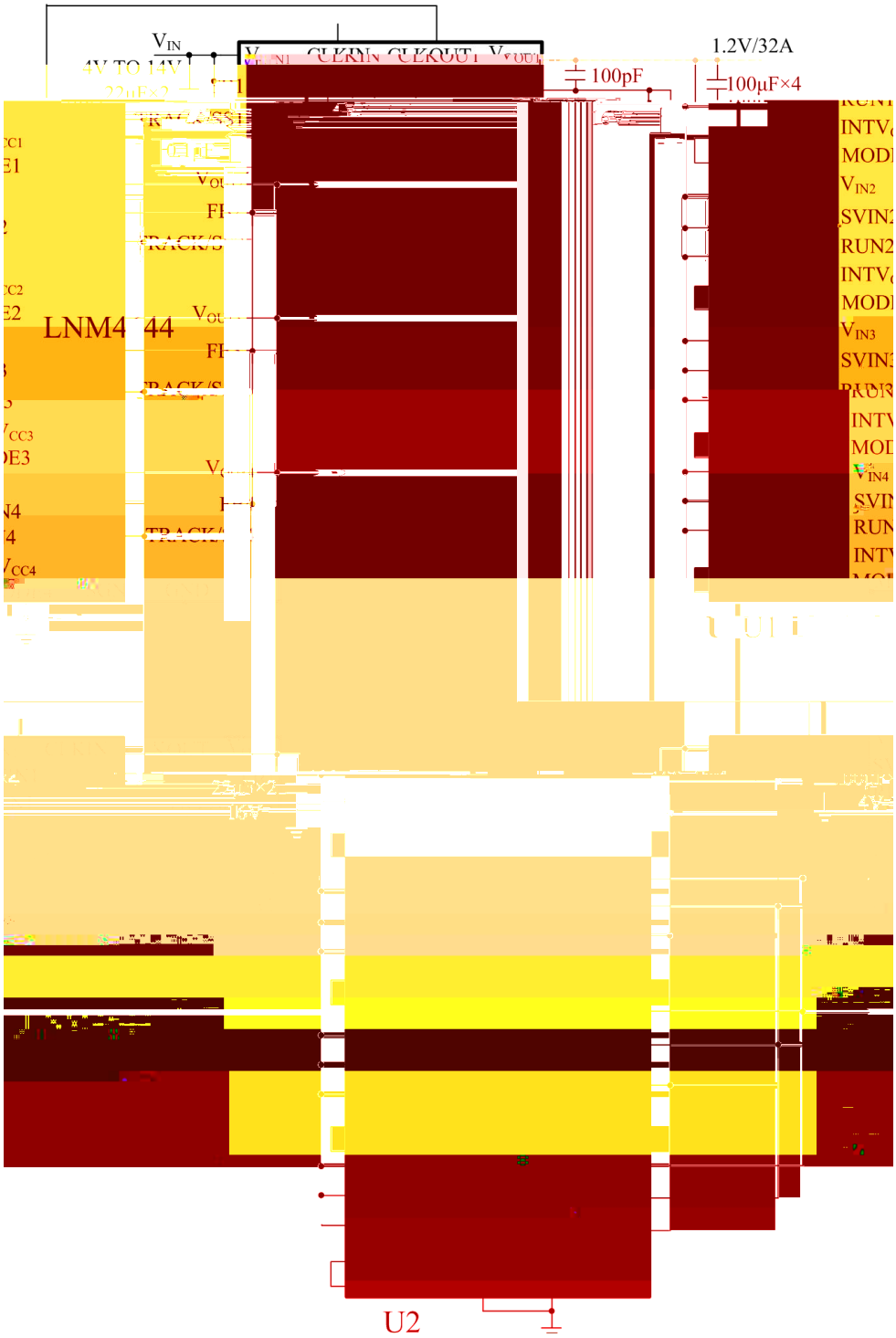
5V 1.2V 8A
12V 3.3V 8A



2.5V-5V 1V 1.2V 1.5V



4V-14V 1.2V 32A



LNM4644

LNM4644YMBG	LNM4644	BGA	-55 ~125	77		RoHS	MSL3
LNM4644YMBW	LNM4644	BGA	-55 ~125	77		RoHS	MSL3
LNM4644YMBB	LNM4644B	BGA	-55 ~125	77		RoHS	MSL3
LNM4644YMBM	LNM4644M	BGA	-55 ~125	77		RoHS	MSL3
LNM4644YMAB	LNM4644B	BGA	-55 ~125	77		37Pb/63Sn	MSL3
LNM4644YMAM	LNM4644M	BGA	-55 ~125	77		37Pb/63Sn	MSL3