

SCT2120

NAME	PIN NUMBER		PIN FUNCTION
	FCTQFN1.5X2-8L	FCSOT23-8L	
7	#	*	7 5
84)	5
9 6	%	(9
A F	&		A B
B9 6		&	B 9
E	(%	E E AE87F F AE87F
)		B
B9	*	#	B F B9 B9 #

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A

PARAMETER	DEFINITION	MIN	MAX	UNIT
		*		
A F	A	(
F	A	&	#	5

PARAMETER	DEFINITION	MIN	MAX	UNIT
	: 4 : 4 E 7675 E # #& #			
7E6	5 6 56 E 7675 E #&	#	#	
	# : 4 56 E 7E6 7675 E # #&			

PARAMETER	THERMAL METRIC	FCTQFN1.5X2-8L	UNIT
D	#	+#	

8 # 7 5 8F D 8 7 5 FF4D

8 % D 8 & 5 F

8 84 F 8 (A F

(— 1)

A F
D78
D84F 84
D844 84

Under Voltage Lockout UVLO

F E5F # A A)

Enable(EN)

7 & 8 7 E5F # F 7 # #%% 7 7
AE87F .

Soft Start(SS)

F E5F #
F #

Over Current Protection (OCP) and Hiccup Mode

AE87F A88 AE87F A AE87F
% F A AE87F AE87F
AE87F

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Output Voltage

F
 D# D # =
 D D
 % D#

V _{OUT}	R ₁	R ₂
#	# =	# =
#*	=	# =
	% & =	# =
%%	&(& =	# =

1 (—— 1) 2 %

,
 D78
 (

Inductor Selection

F
 D E 65 65D
 :

&

F BB 7 &

(-)

&

,
 BB

8E E E E 5 6 #% E 465 4F 8&(&* F # (&& #%(+%F 99 9 A F

D E

(F)

B7 = D E

$$\frac{\sqrt{()^2 + \frac{1}{12} ()^2}}{2} ()$$

B7 =

A F 65

BB

D E

D E

% 4 % F

B7 =

E5F #

F

F

Input Capacitor Selection

F

5

5

6565 6565

D)D

65

7ED

7ED

8

9 6

(%

B

F

7

*

F D E

$$\sqrt{\frac{1}{(1 -)}}$$

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F 7 # F
_____ (1 —) #

V_{IN}
8E
5
A F

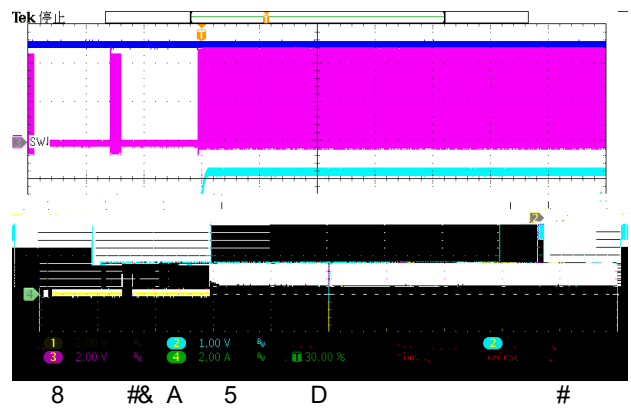
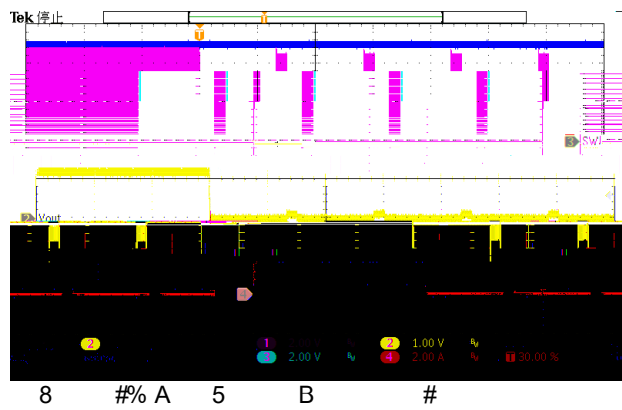
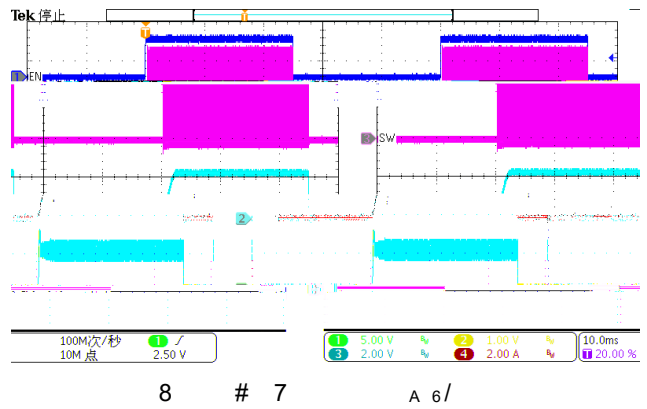
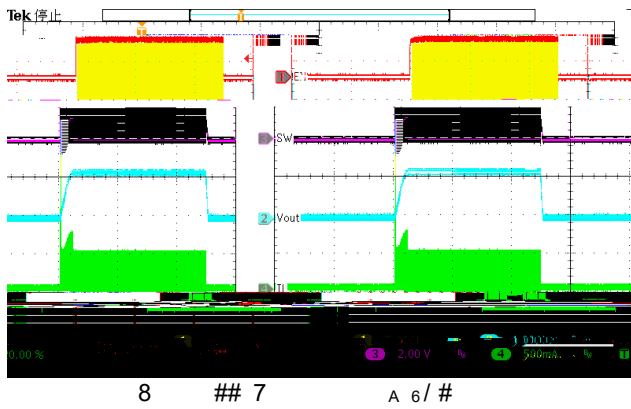
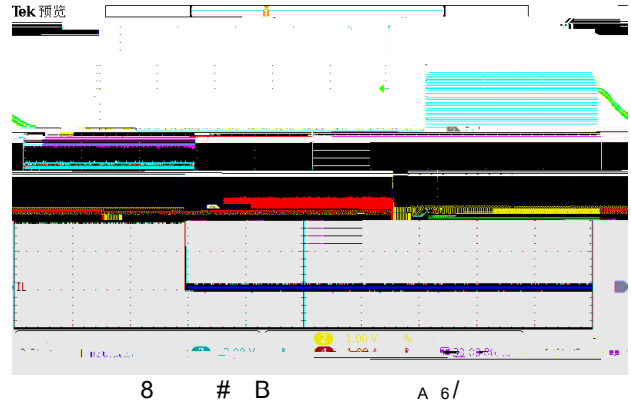
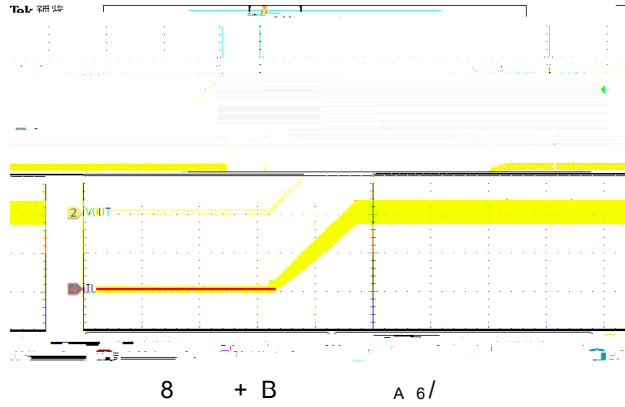
8 # 8)D # # 8

Output Capacitor Selection

F
F 7 E D 7ED A
8 F 7ED 8

Application Waveforms

/ A F / #



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Application Waveforms

8 # F #* #(8 #(F #

Layout Guideline

B B54 E5F # F
8
B ,
B54 E F
B 7ED
% 8
&

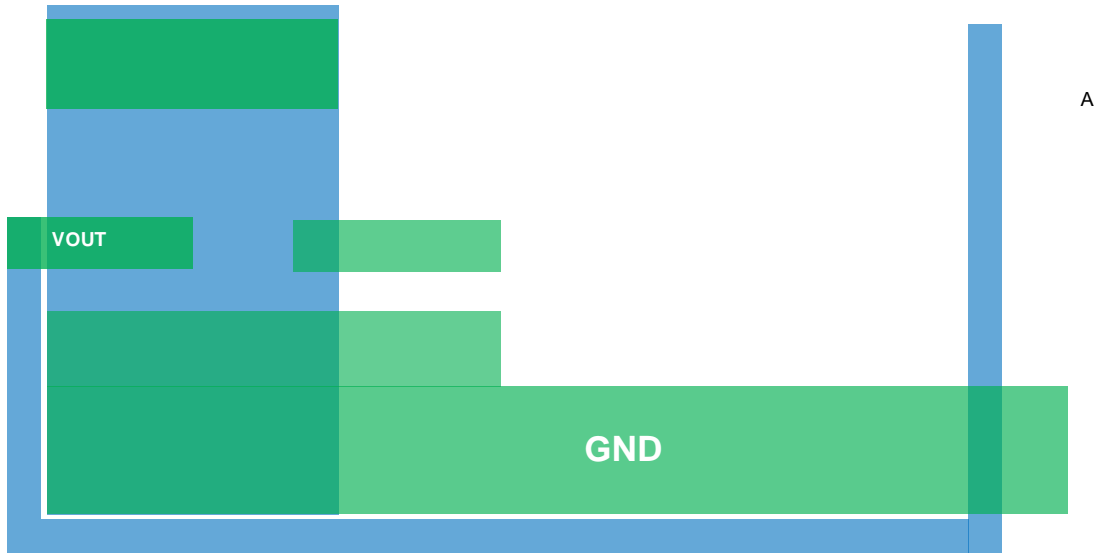
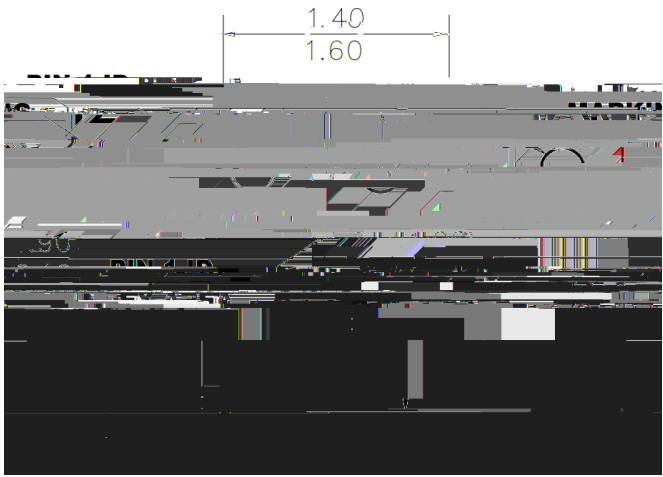
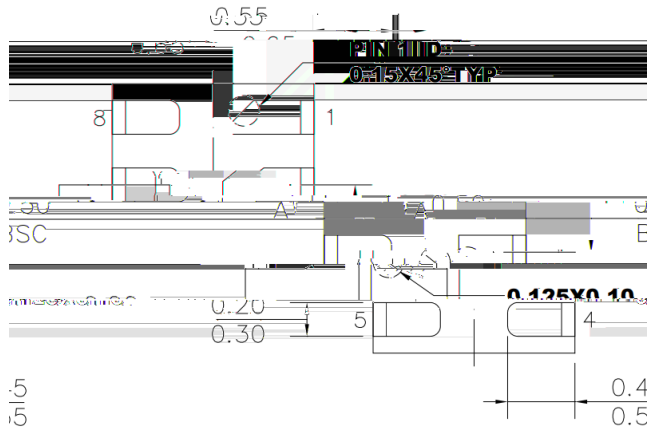


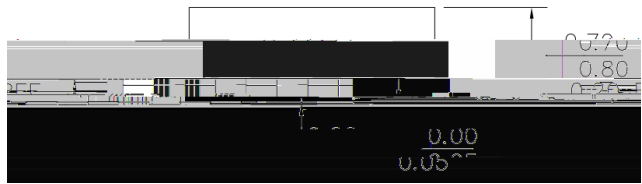
Figure 22. PCB Layout Example (SCT2120 TTBR)



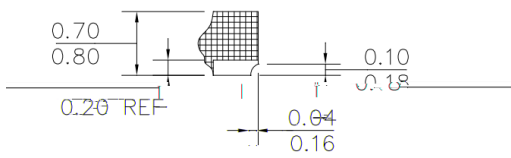
FAB 7



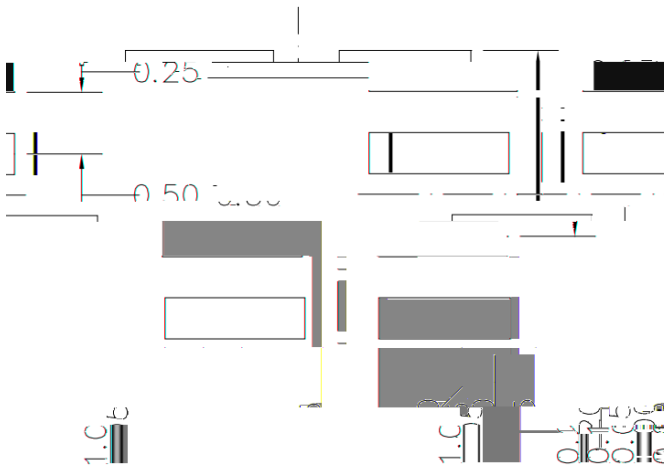
4AFFA 7



E 67 7



E75F A



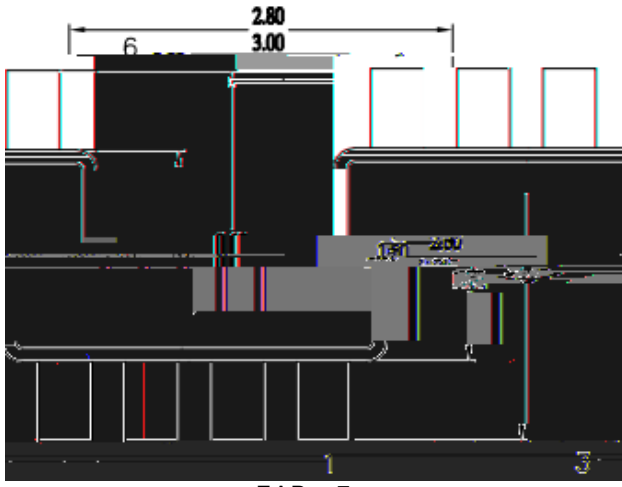
D75A 7 676 6 B FF7D

85F 8 # * B A 6

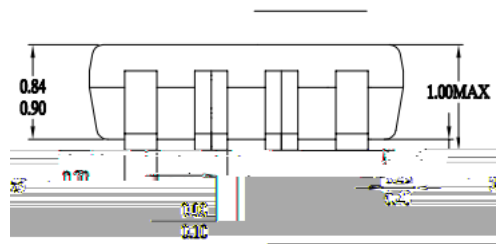
NOTE:

F: 7 7 6 E67 E 7FF 4 7
 6 7 EA E D7 7F7DE
 % 7 65AB DF E: 47 * 7F7DE
 & 7675 D787D7 57 E A
 6D 9 E AFFA E5 7

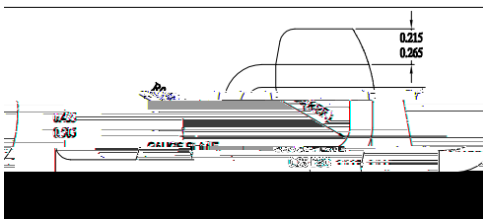
SCT2120



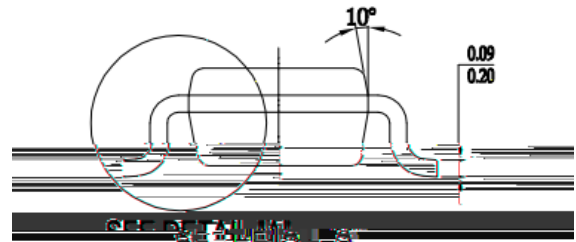
FAB 7



4AFFA 7



E75F A

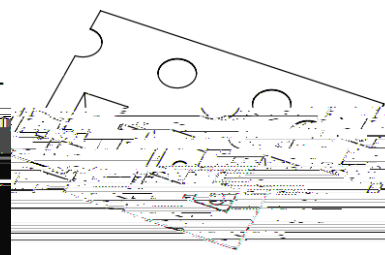
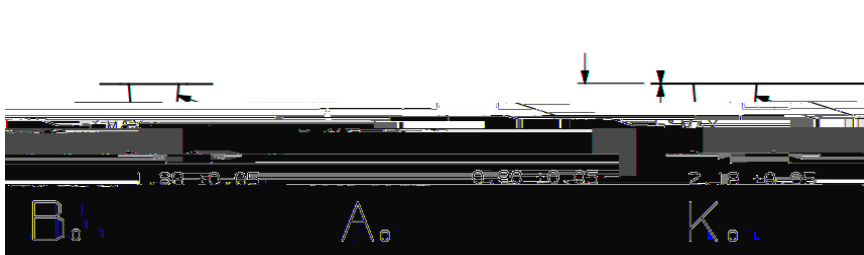
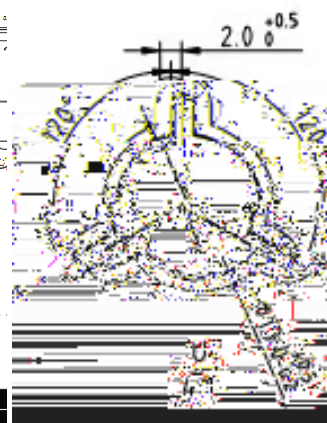
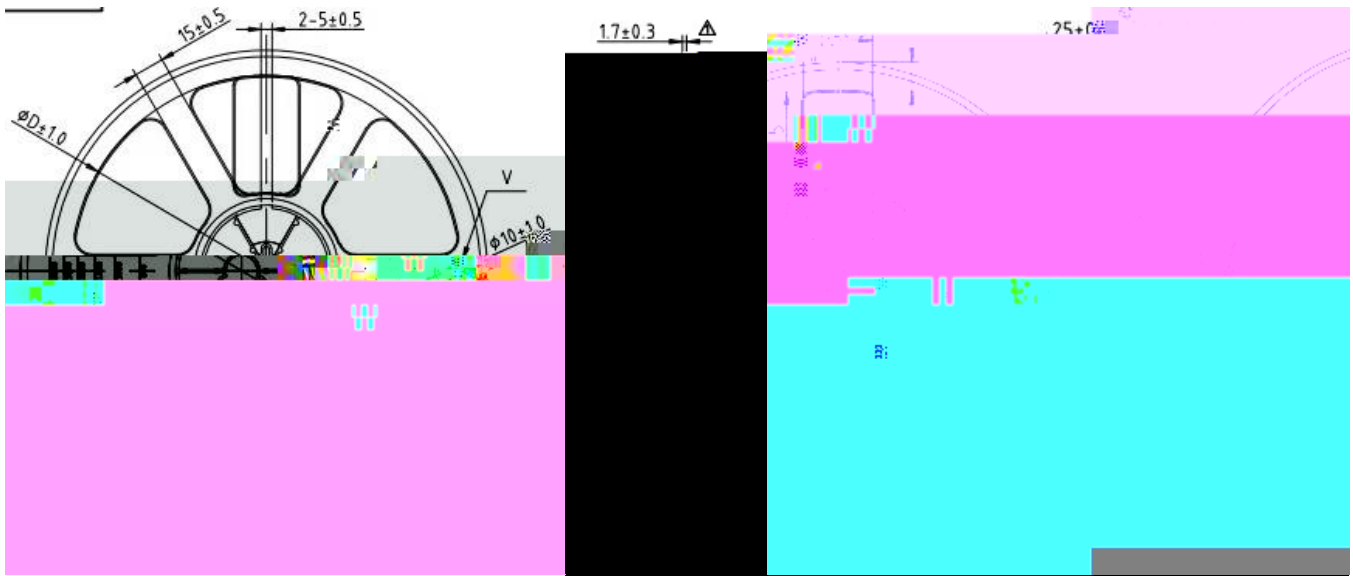


E 67 7

85EAF %* B A 6

NOTE:

7 6 8D 75) F: 5= 7EE #)
 7 6 8 E: EA 67DB F76
 % 4AF: B 5= 97 7 9F: 6 6F: 6A AF 5 67 8 E:
 & 8AD 76 7 6 E: 47 B D F: D7EB75F FDA A 7 AF: 7D F: # &
 5A FDA 9 6 7 EA
 (D7 A 76 8 E: 47F 77 7 6E B 5= 977 6 8 E: E:
 AF 7 5776 # 8DA 4AFFA 4A6 B7DE 67
) F: 7 BA6 EA BB FA 85FEAF E7D 7E
 * F: 7 (6 BDA6 5FE F: A F B 7 E 6 BDA6 5FE



NOTICE: F

) +) + * & # 9 F &) % && % % & F 9 (& () % F 7F 465 & +