

SCT44160

REVISION HISTORY

DEVICE ORDER INFORMATION

ORDERABLE DEVICE	PACKAGING TYPE	STANDARD PACK QTY	PACKAGE MARKING	PINS	PACKAGE DESCRIPTION	MSL

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	MIN	MAX	UNIT

PIN CONFIGURATION

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PIN FUNCTIONS

NAME	NO.			I/O ⁽¹⁾	PIN FUNCTION
	A Version	B Version	C Version		

RECOMMENDED OPERATING CONDITIONS

PARAMETER	DEFINITION	MIN	MAX	UNIT

ESD RATINGS

PARAMETER	DEFINITION	MIN	MAX	UNIT

SCT44160

THERMAL INFORMATION

PARAMETER	THERMAL METRIC	ETSSOP-28L	UNIT

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
Power Supply						
		°C				

Logic Input(INx,DIAG_EN,THER,SEH,SEL)

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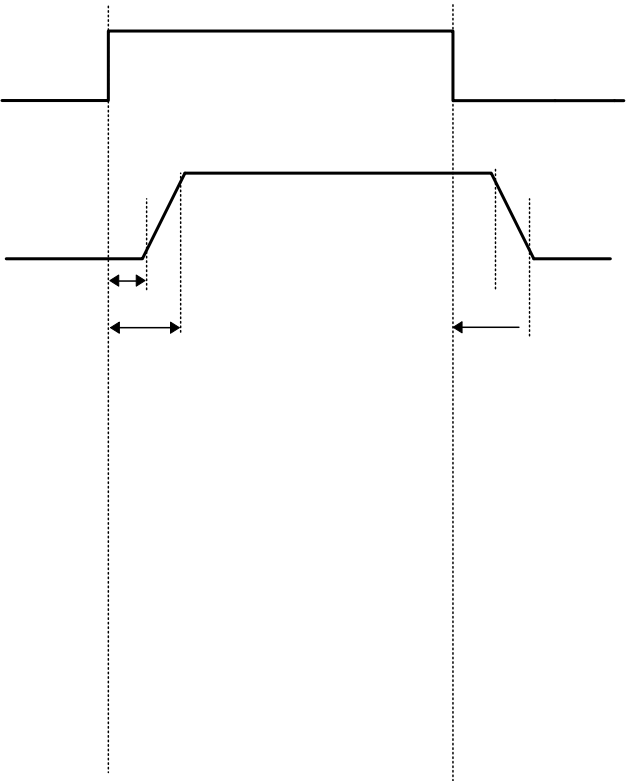
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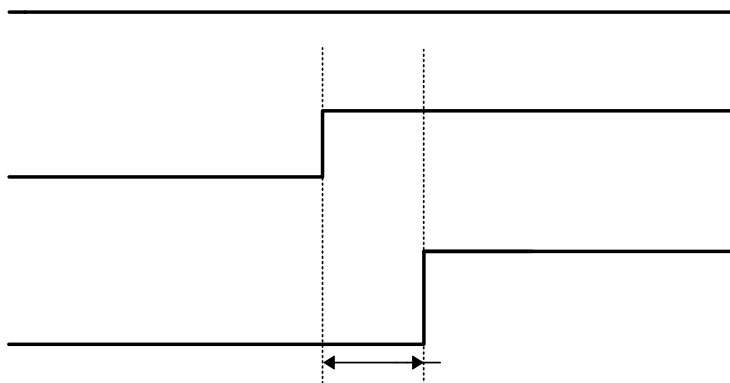
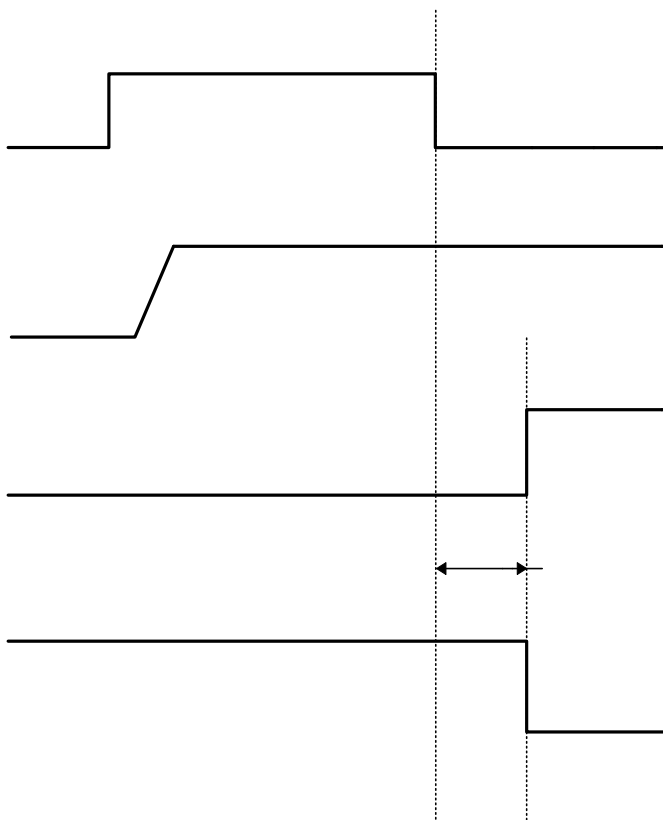
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		°C		

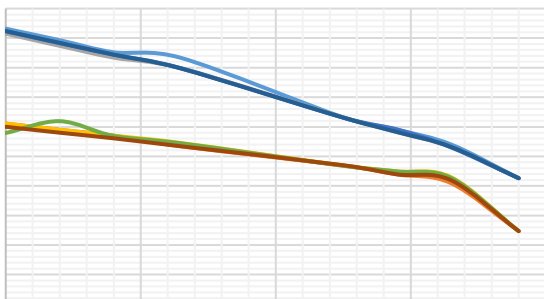
Switching

Current Sense timing

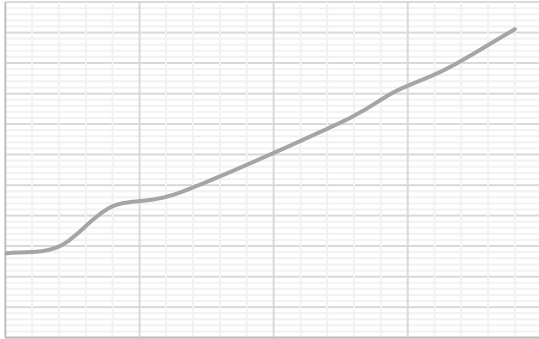




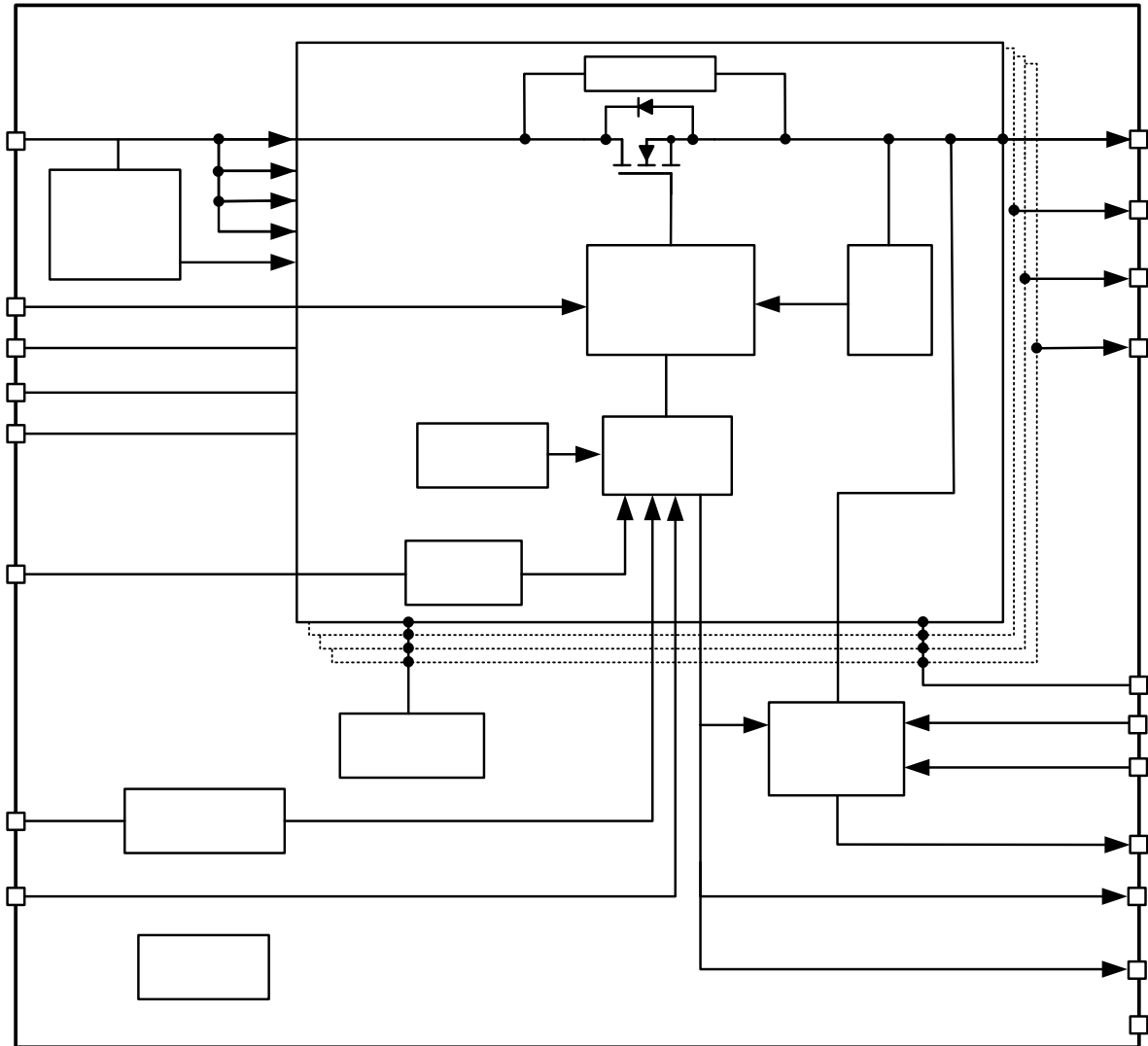
TYPICAL CHARACTERISTICS



TYPICAL CHARACTERISTICS



FUNCTIONAL BLOCK DIAGRAM



OPERATION

Overview

Adjustable Current Limit

$$= \frac{\quad \times}{\quad}$$

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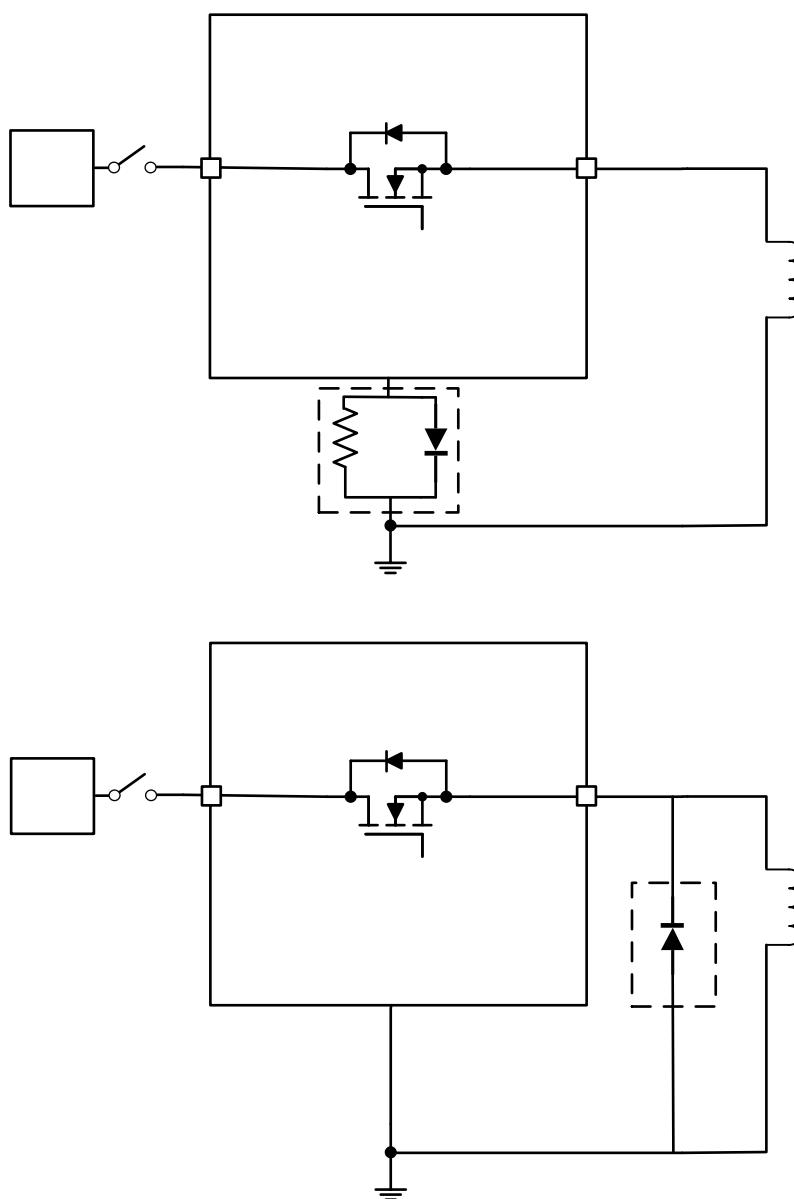
Accurate Current Sense

Thermal Shutdown

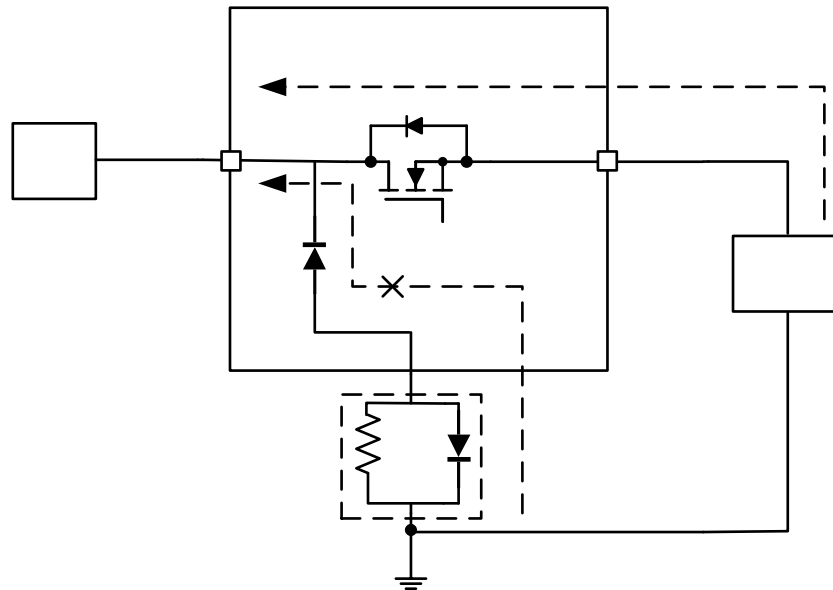
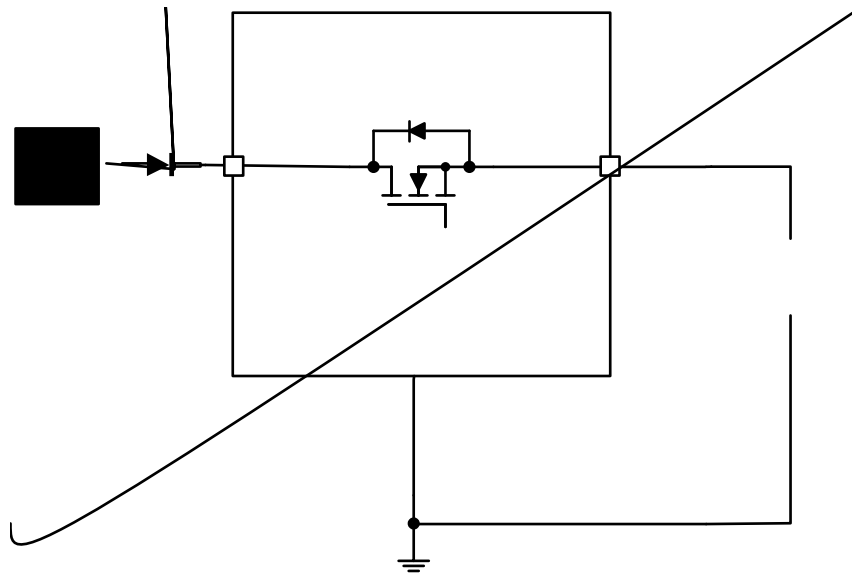
Inductive-Load Switching-Off Clamp

APPLICATION INFORMATION

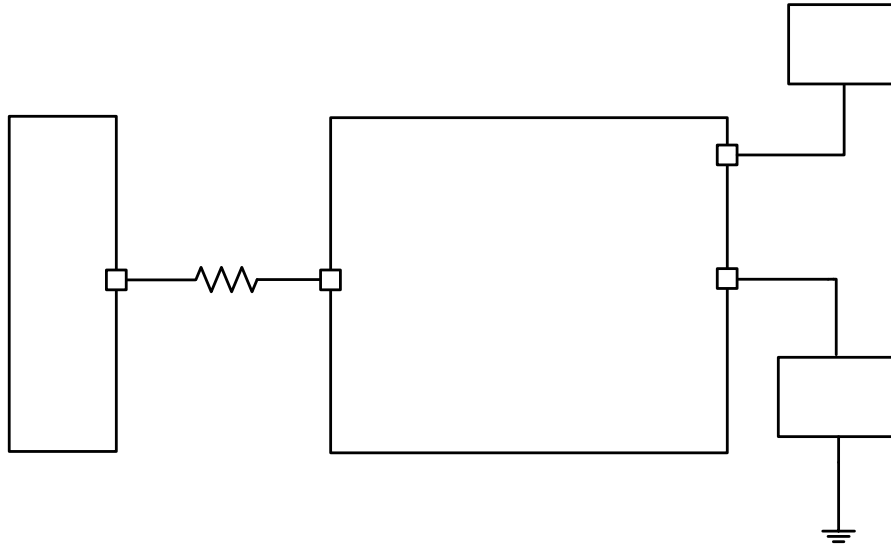
Protection for Loss of Power Supply



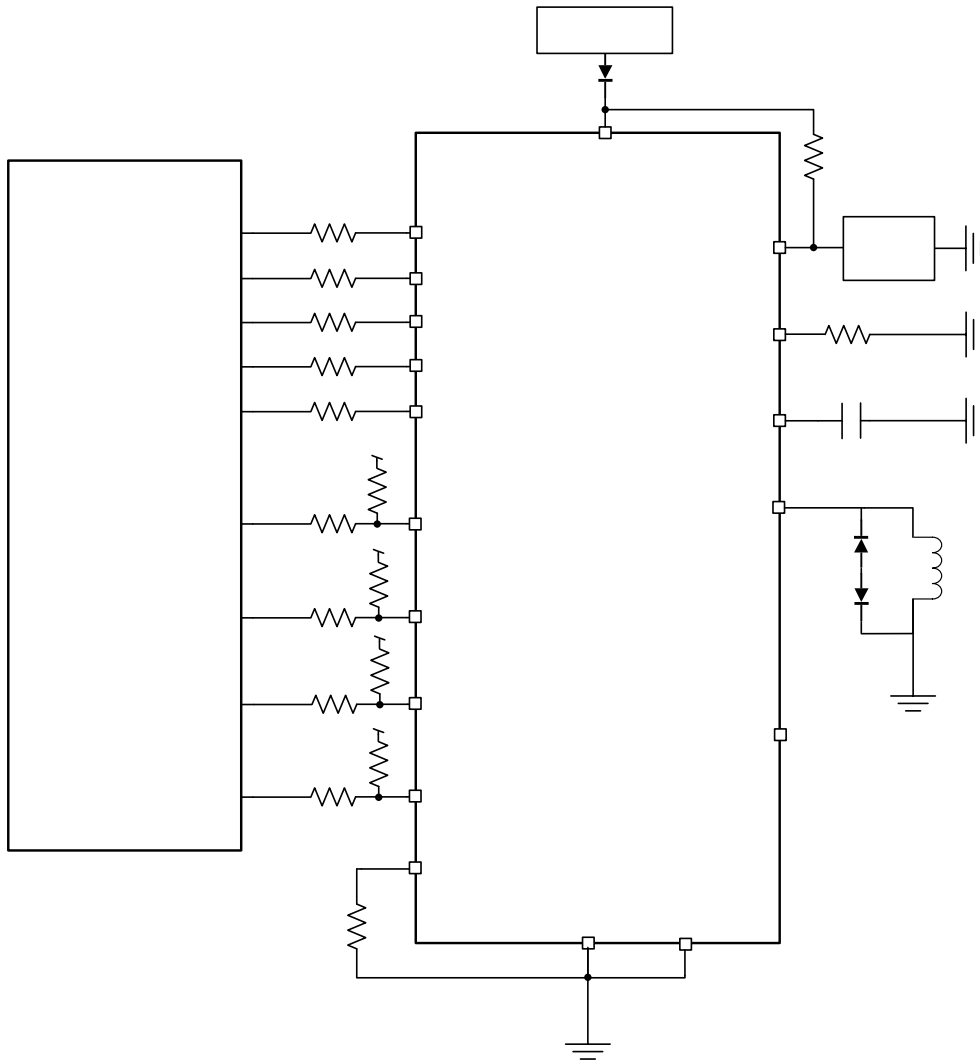
Reverse-Current Protection



MCU I/O Protection



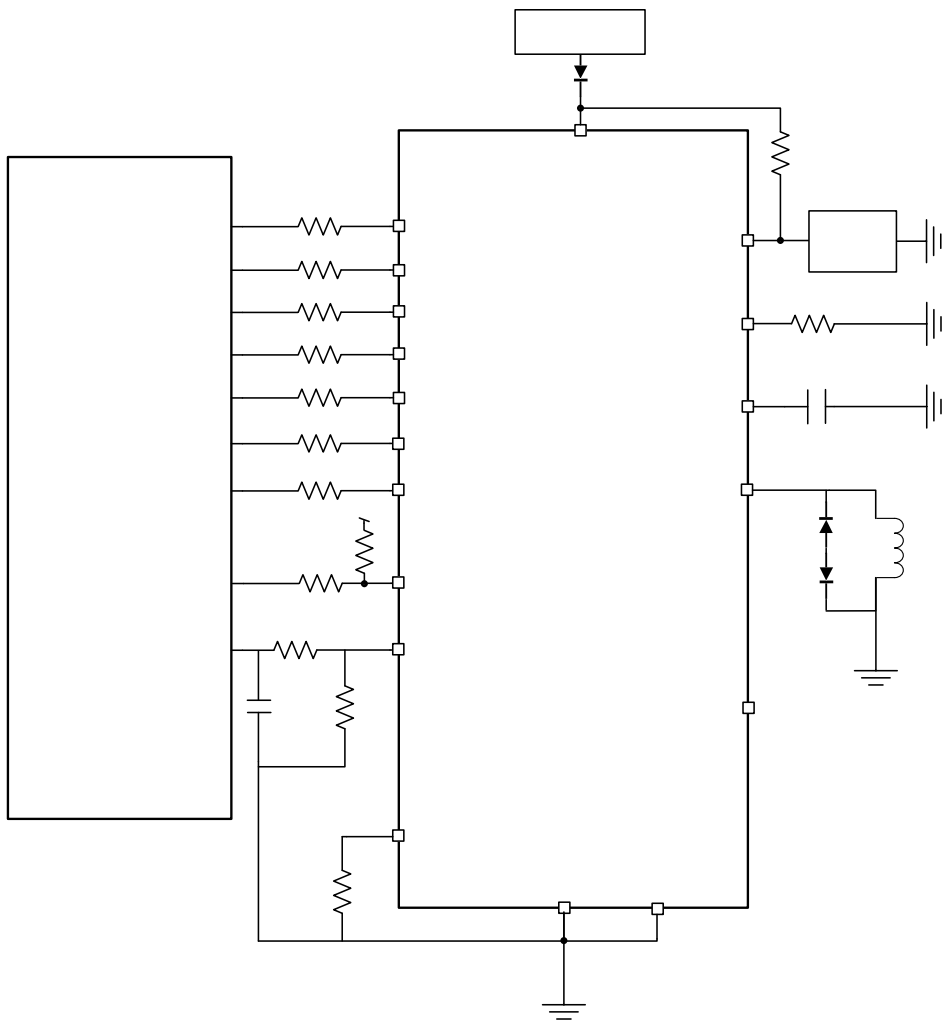
Typical Application



Design Parameters

Design Parameters	Example Value

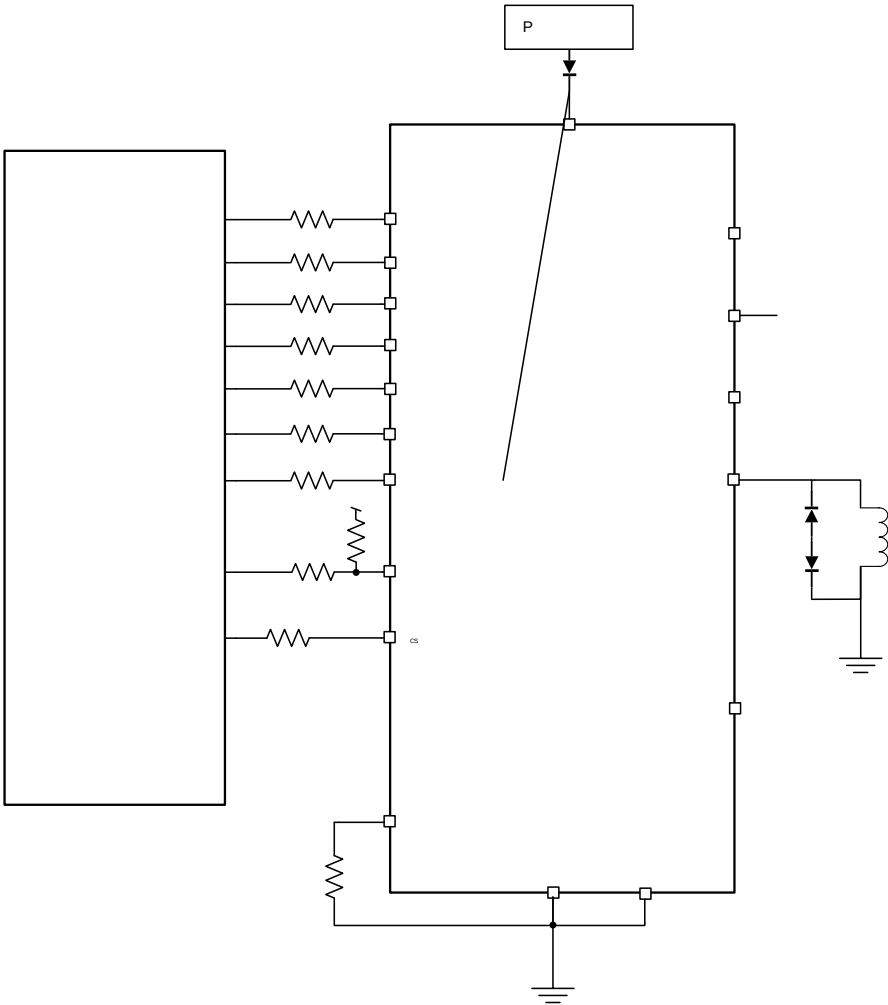
Typical Application (continued)



Design Parameters

Design Parameters	Example Value

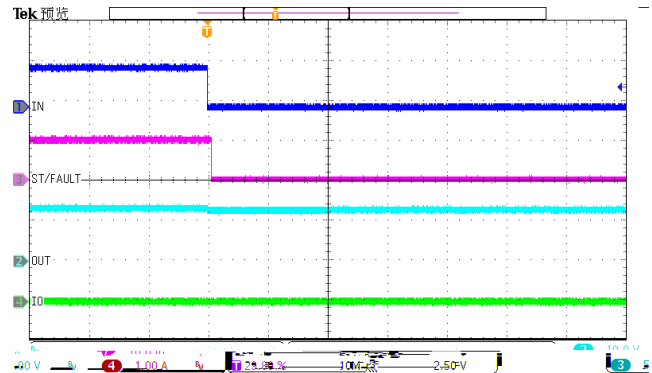
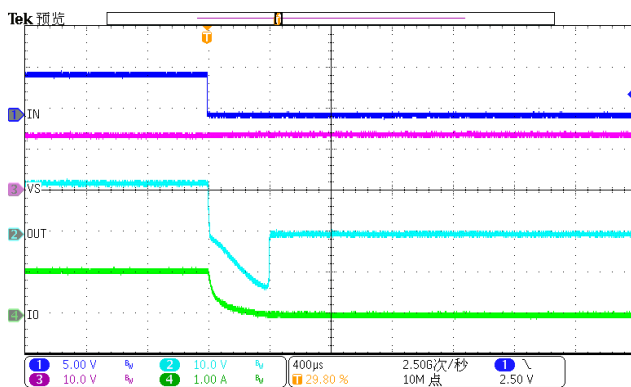
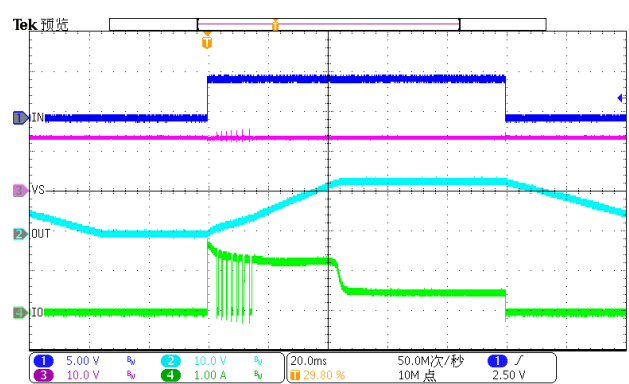
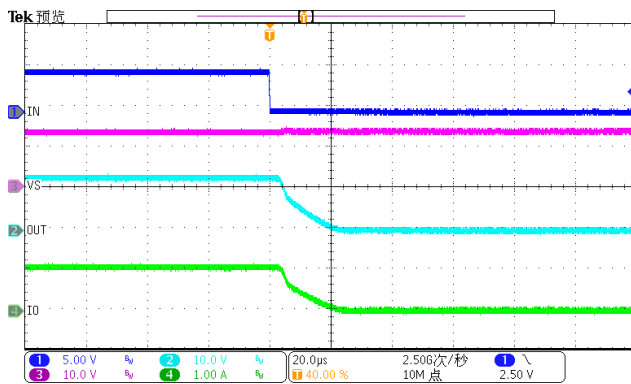
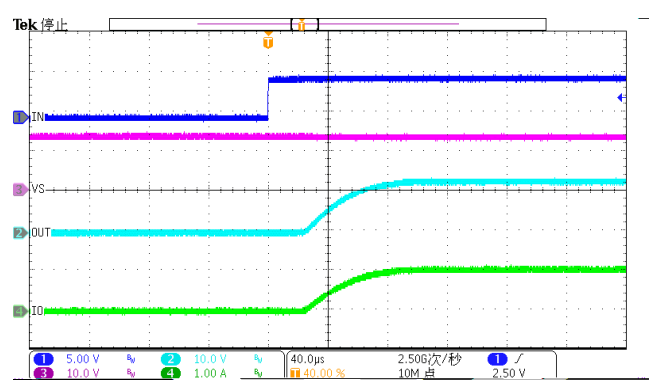
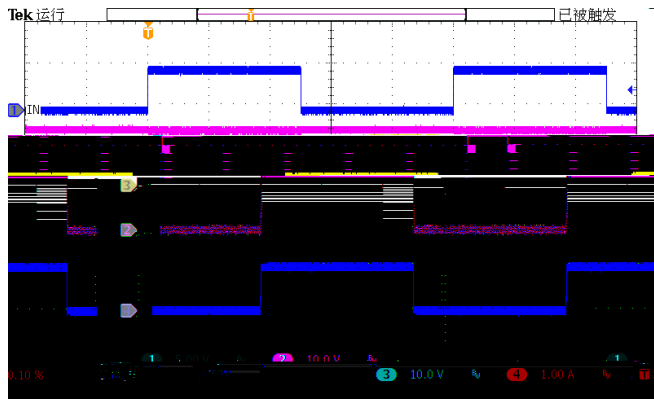
Typical Application (continued)



Design Parameters

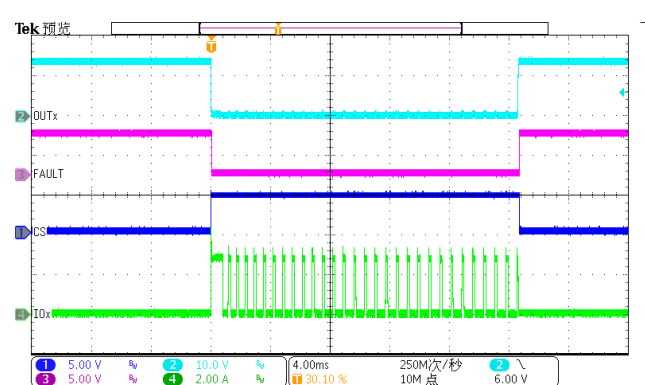
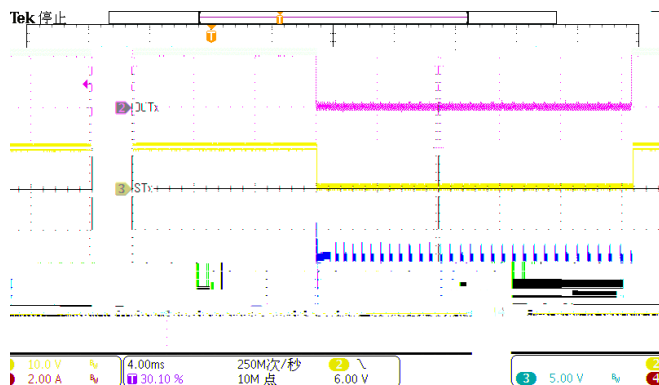
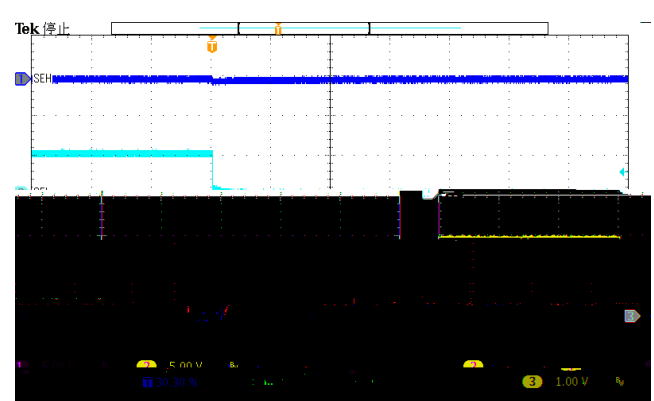
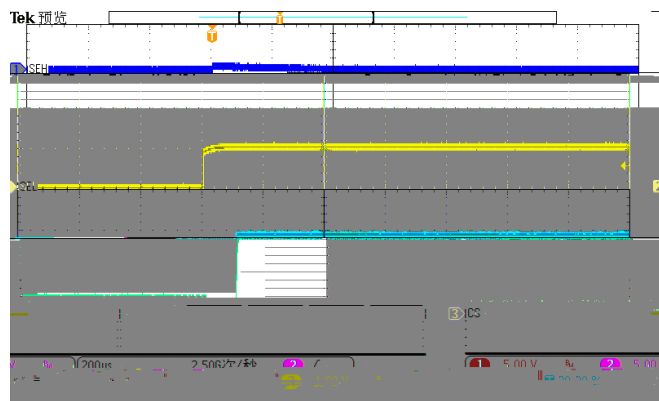
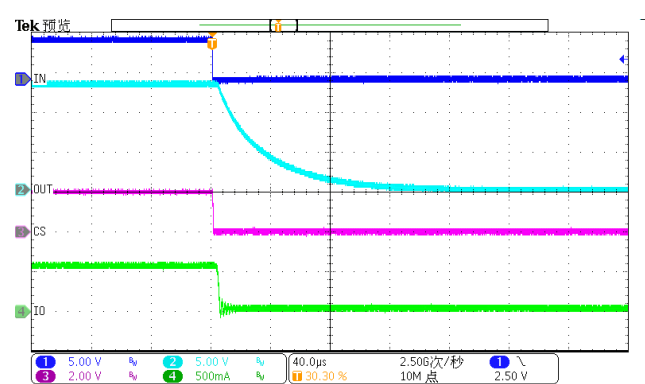
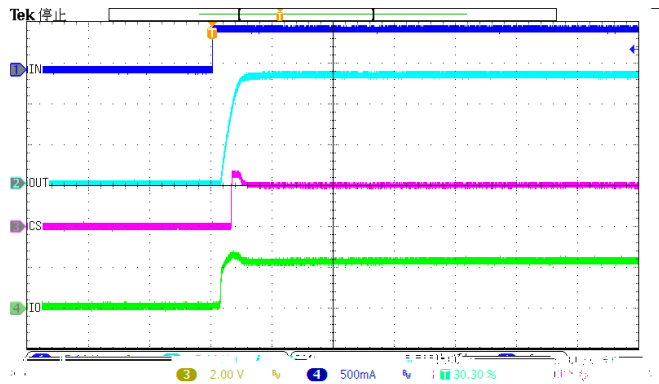
Design Parameters	Example Value
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Application Waveforms

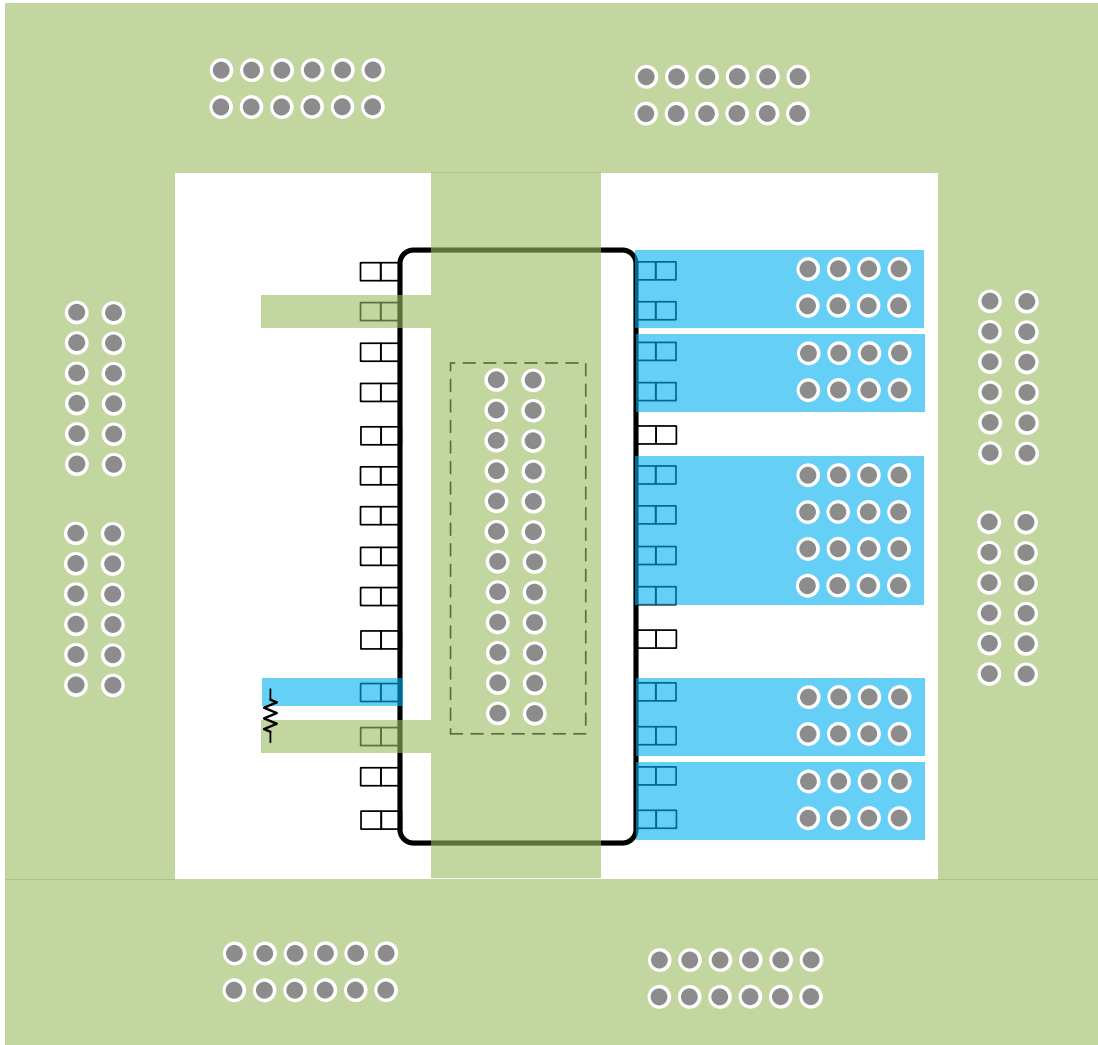


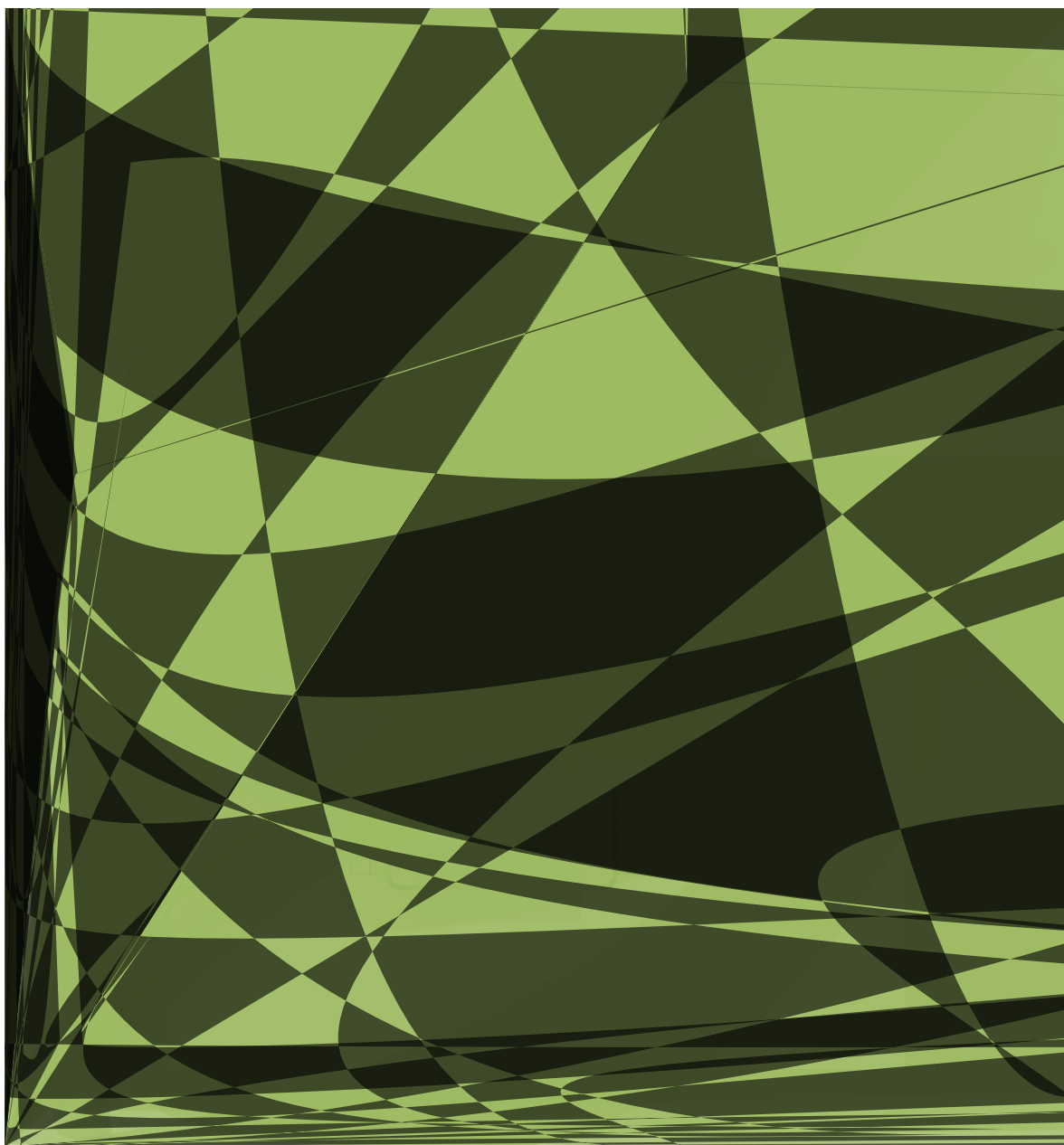
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Application Waveforms(continued)

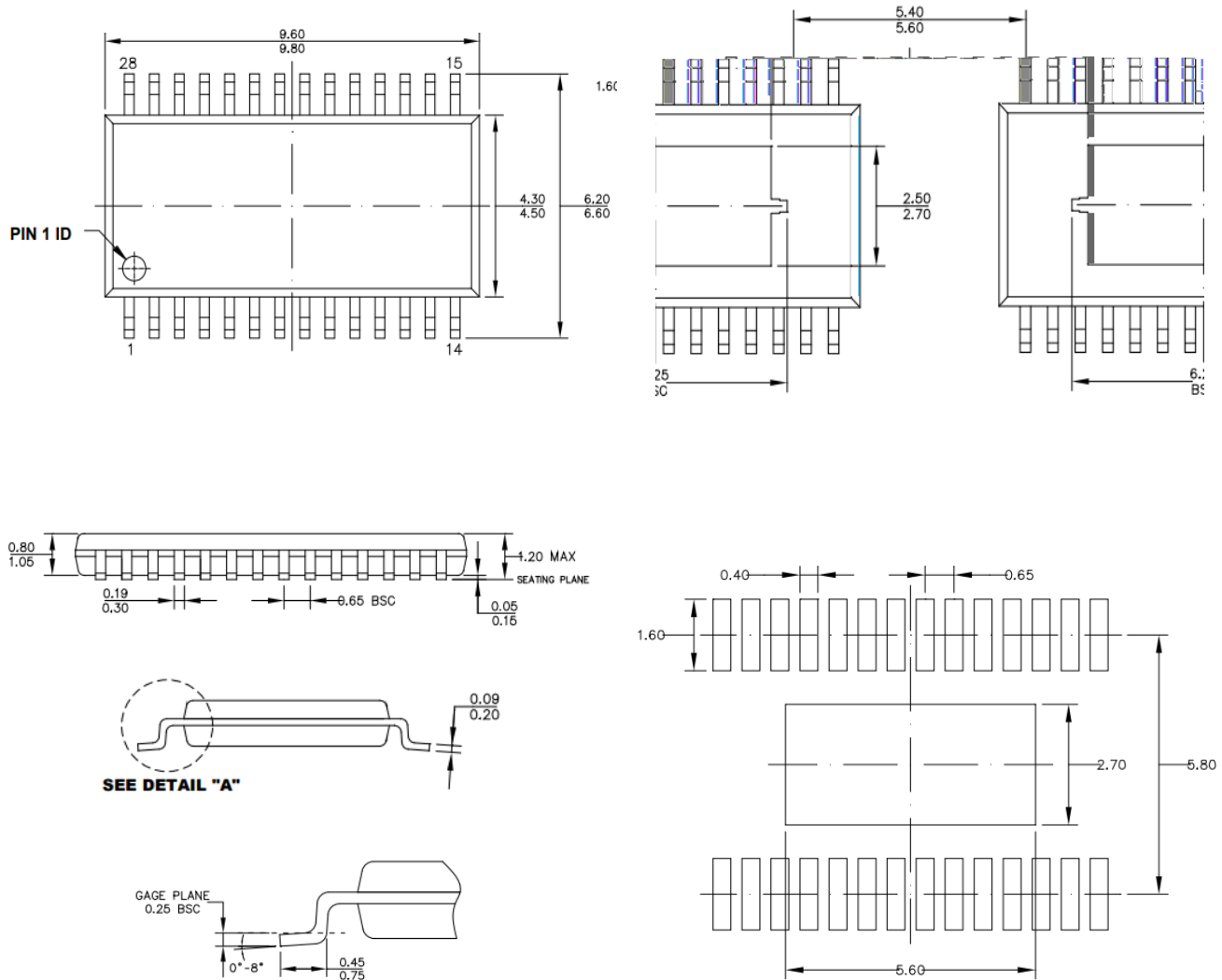


Layout Guideline

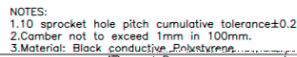
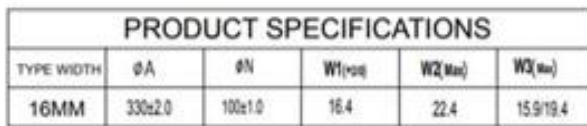




PACKAGE INFORMATION



NOTE:



4. A- and B- measured on a plane 0.3mm above the bottom of the pocket.
5. A- measured from a plane on the inside bottom of the pocket to the top surface of the carrier.
6. Pocket position relative to sprocket hole measured as true position of pocket, not pocket hole.
7. Pocket center and pocket hole center must be same position.

