AM8275
4K UHD MULTIMEDIA SOC

DATASHEET

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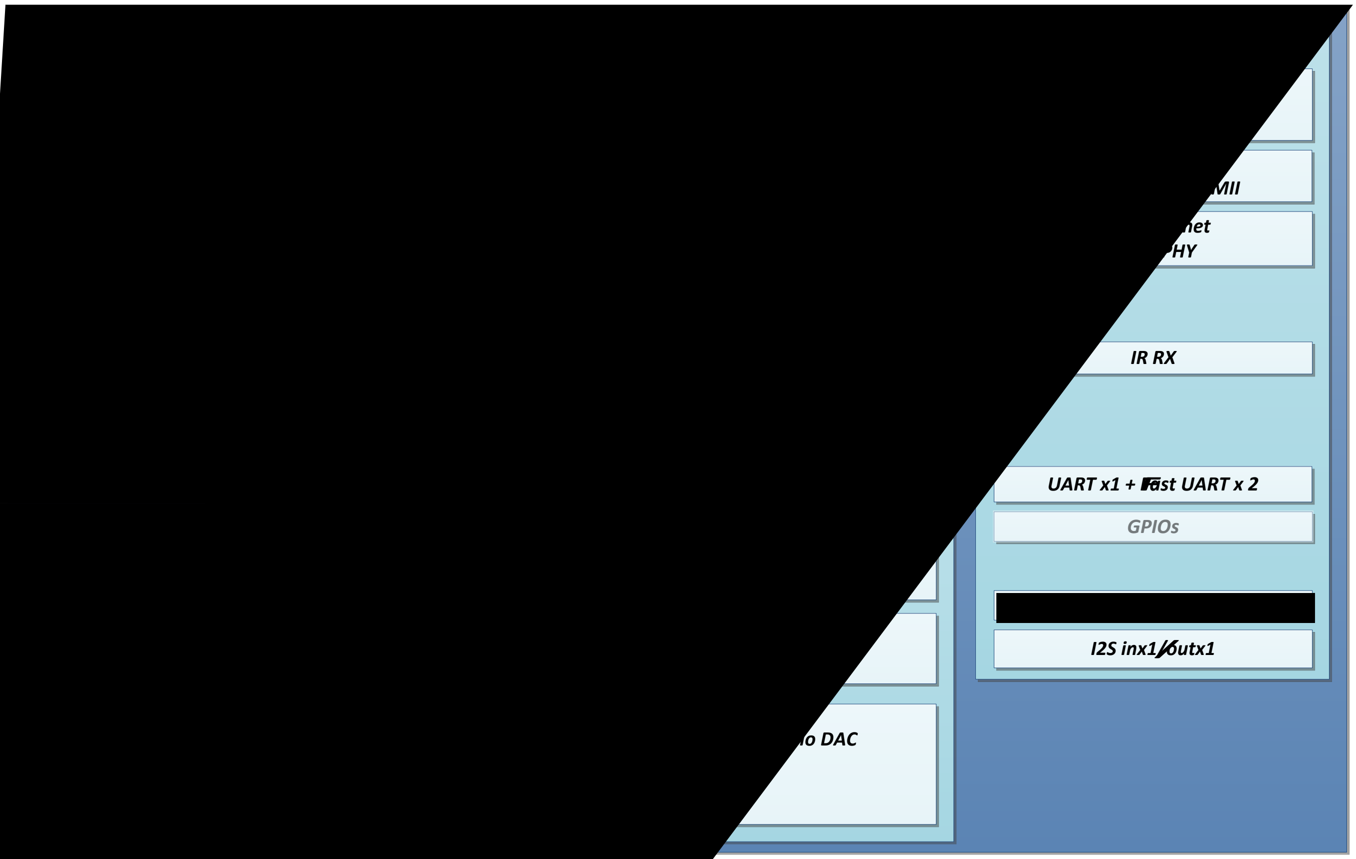

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ock Diagram

5.1. P A (B)

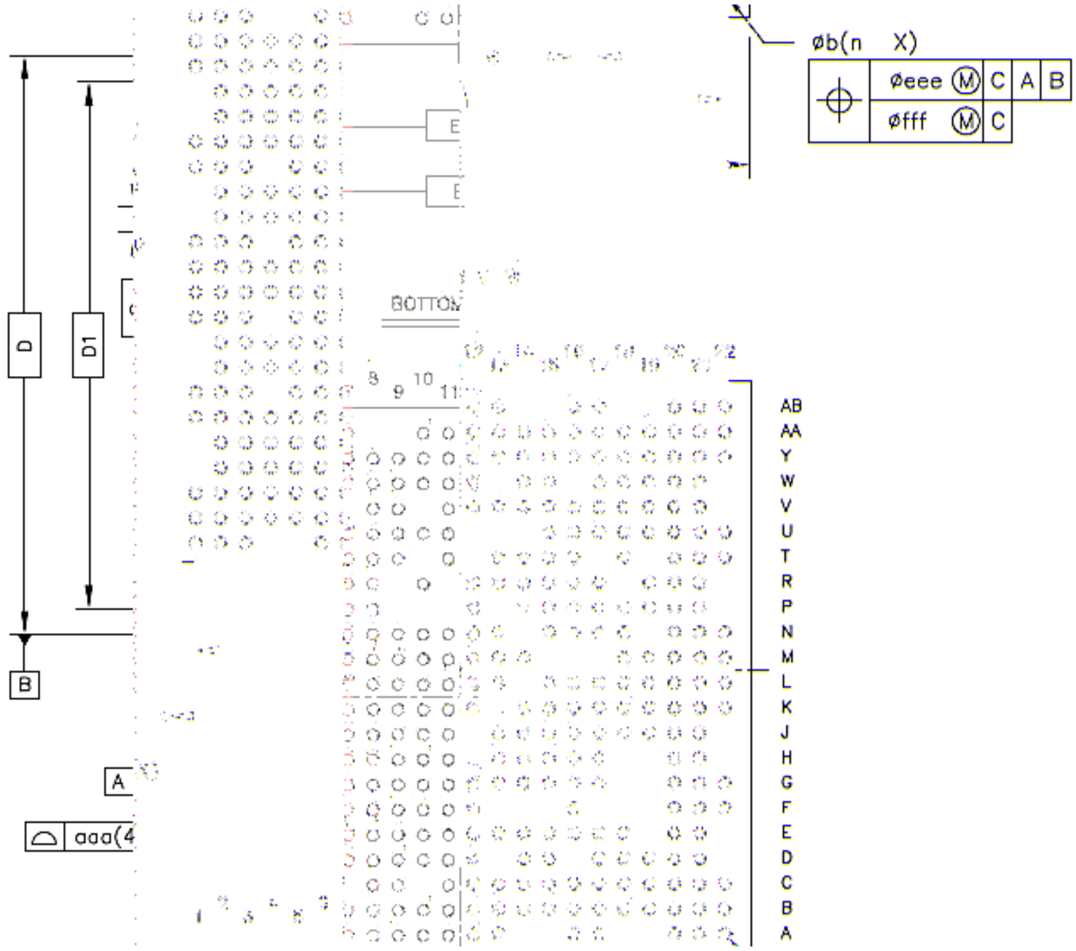

Figure 2. Pin Assignments (Bottom View)

Table 1. Pin Descriptions

[redacted]

	[redacted]			
	[redacted]			
	[redacted]			
	[redacted]			

7.1. A M R

Table 2. Power Supply Specification

7.2. R O C

Table 3. Recommended Operating Conditions

Table 4. DC Characteristics

7.5. C R

Table 6. Crystal Requirements for the AM8275

7.8. P -O S

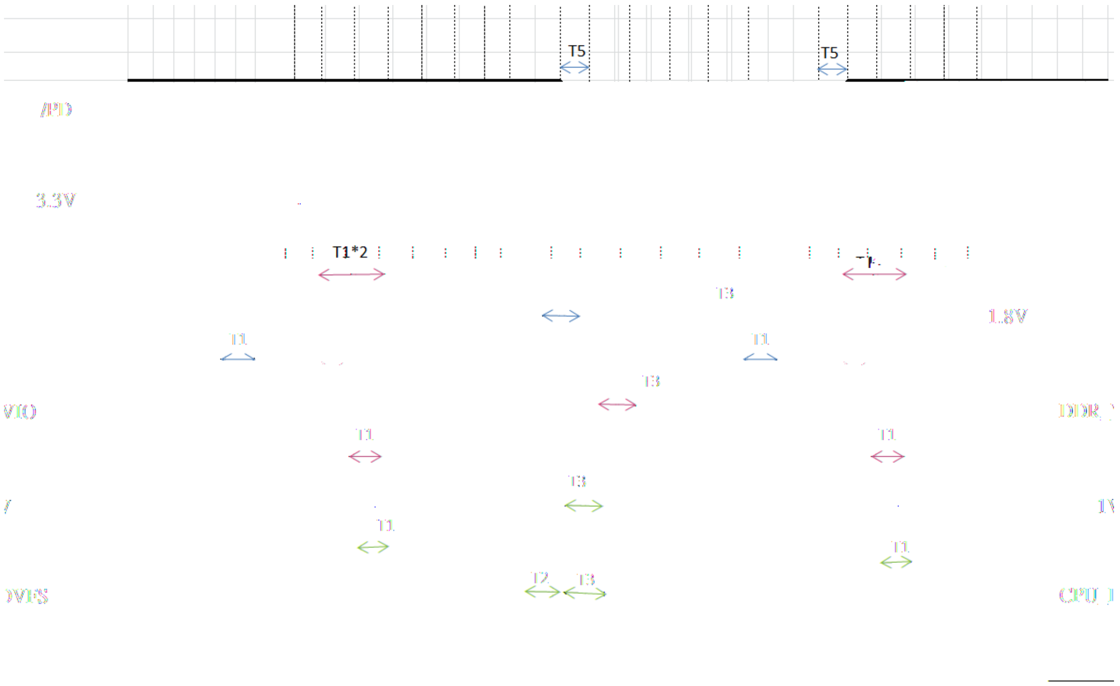

Figure 3. Power-On Sequence Timing Diagram

Table 9. Power-On Sequence Duration

Table 10. Power-On Reset Trigger Level

8.1. F

8.2. DCU B E P D

Table 11. DCU External Pin Description

8.3. DCU B P M T

Table 12. DCU Block External Pin Mux Table

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9.1. F

9.2. S F B E P D

Table 13. Serial Flash Block External Pin Description

9.3. NAND F B E P D

Table 14. NAND Flash Block External Pin Description

9.4. B D S

Table 15. Boot Device Selection

10.1. F

11.1. F

11.2. G SPI E S D

Table 18. General SPI External Signal Description

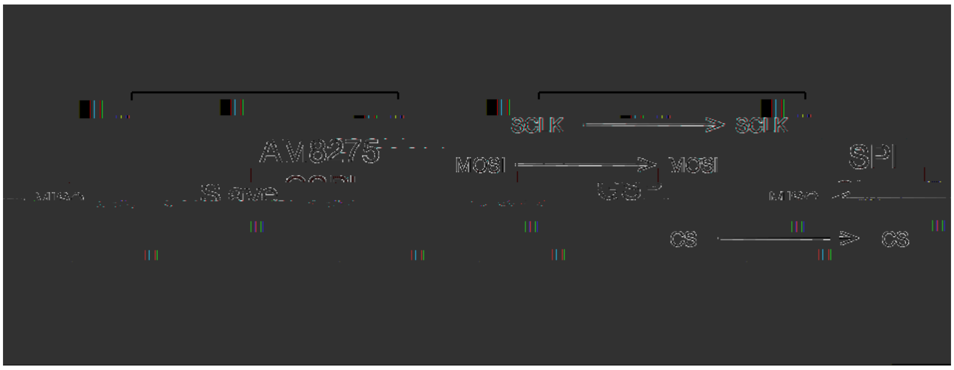

Figure 4. Basic SPI Bus Example

12.1. F

13.1. G P I/O

13.2. U A R T

Table 20. UART Block External Pin Description

13.3. I2C S I

Table 21. I2C Block External Pin Description

13.4. I R C

Table 22. IR RX Block External Pin Description

13.5. T C

13.6. LSADC (L S ADC)

Table 23. LSADC Interface

13.7. P M

13.8. S C I

Table 24. Smart Card Controller External Pin Description

13.9. DC F C

Table 25. DC Fan Control External Pin Description

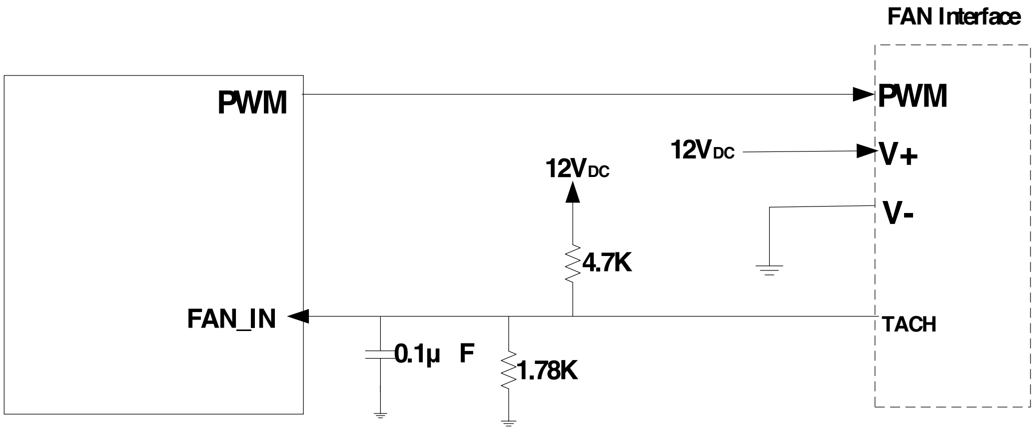

Figure 5. Typical 4-Wire Fan Interface

14.1. F

14.2. T E A O I

Table 26. TV Encoder Analog Output Interface

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15.2. HDMI B E P D

Table 27. HDMI Block External Pin Description

16.1. F

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16.2. A E S D

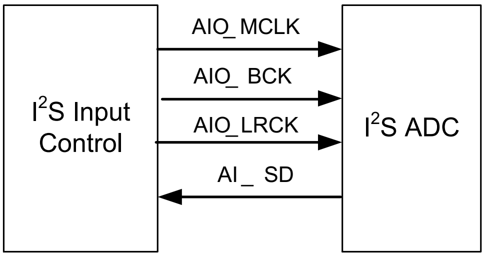

Figure 6. I2S Audio-In Master Mode Interface Configuration

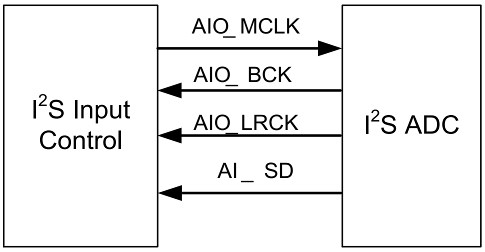

Figure 7. I2S Audio-In Slave Mode Interface Configuration

Table 28. Audio-In Block External Pin Description

17.1. F

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18.1. F

18.2. PCI E 2.0 B E P D

Table 30. PCI Express 2.0 Block External Pin Description

18.3. T PCI E 2.0 A

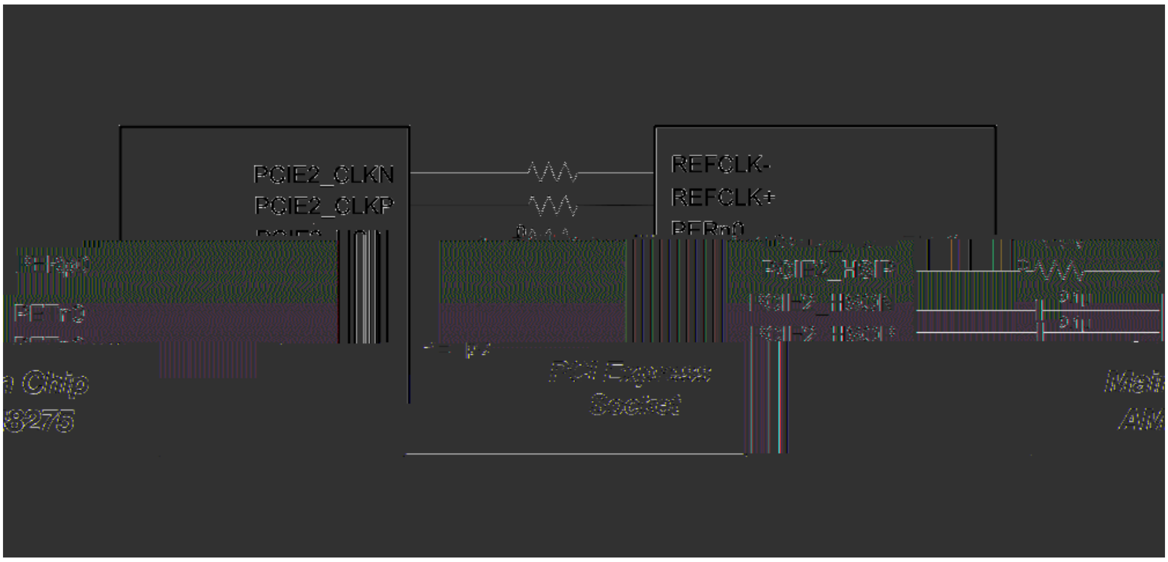


Figure 10. Typical PCI Express 2.0 Application

19.1. F

19.2. E B E P D

Table 31. Ethernet 10/100/1000M Block External Pin Description

19.3. T A

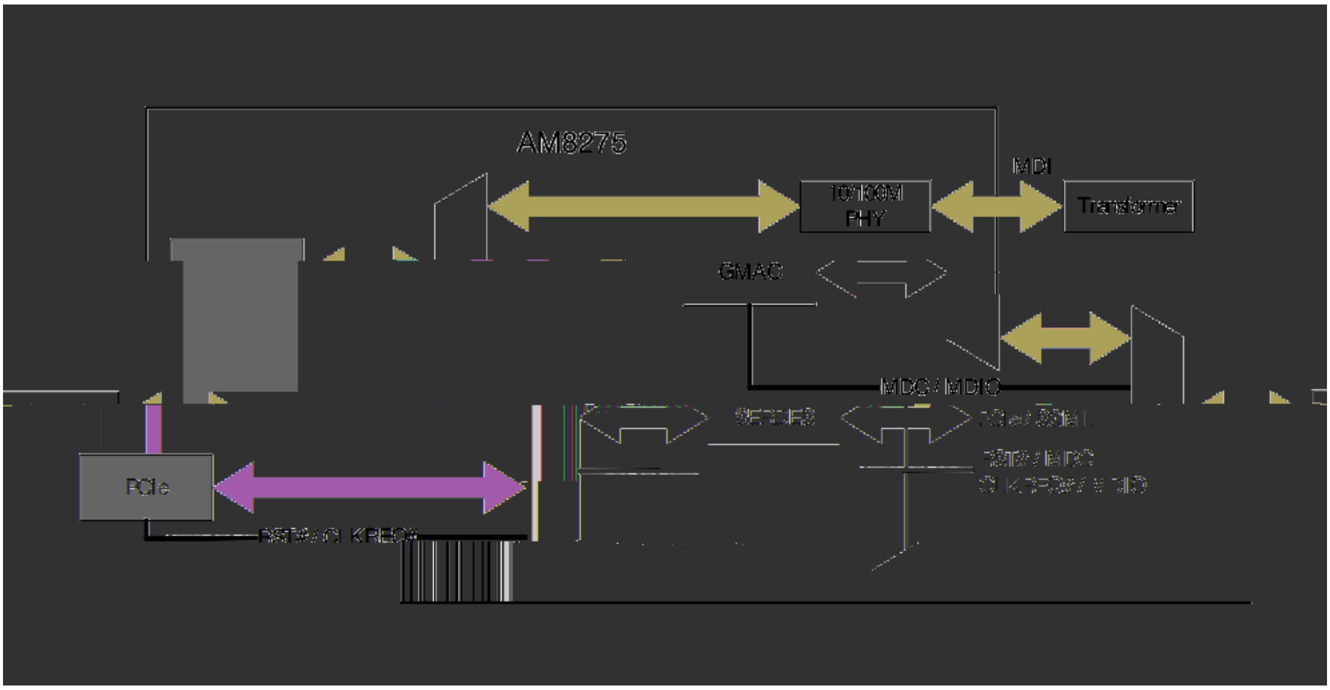


Figure 11. Relationship of PCIe and Ethernet Block

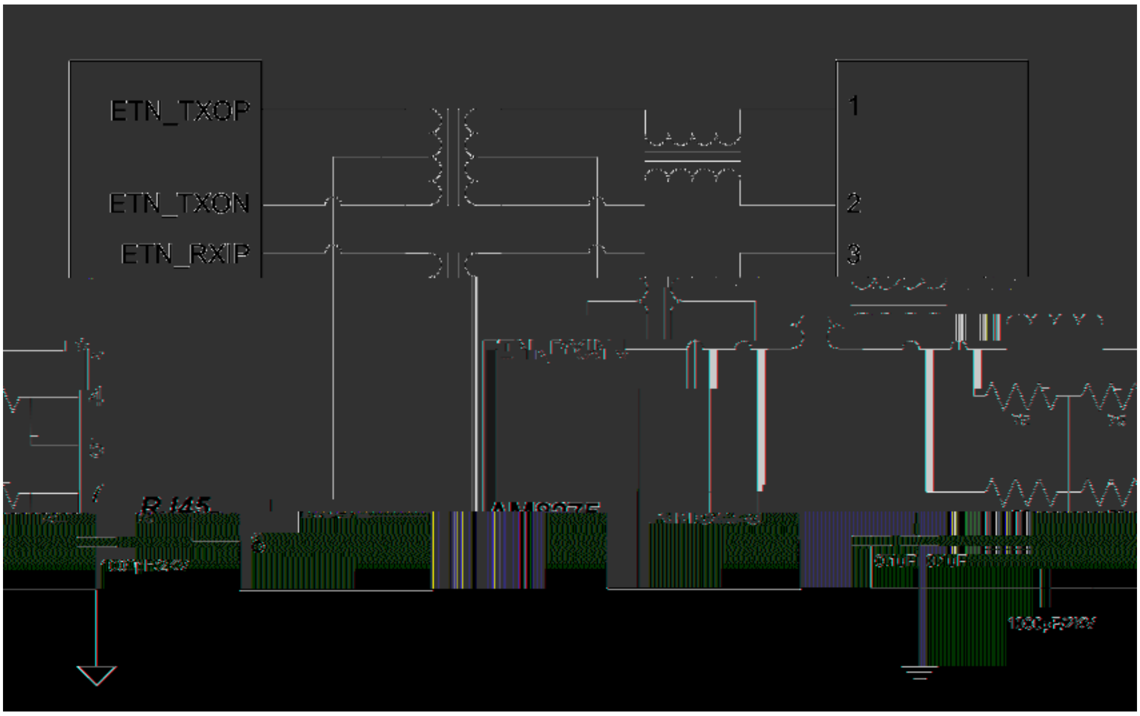


Figure 12. Typical Gigabit Ethernet Application

22.1. F

22.2. C R B E P D

Table 34. Card Reader Block External Pin Description

23.1. F

23.2. C R B E P D

Table 35. Card Reader Block External Pin Description

Table 36. Classification Reflow Profile

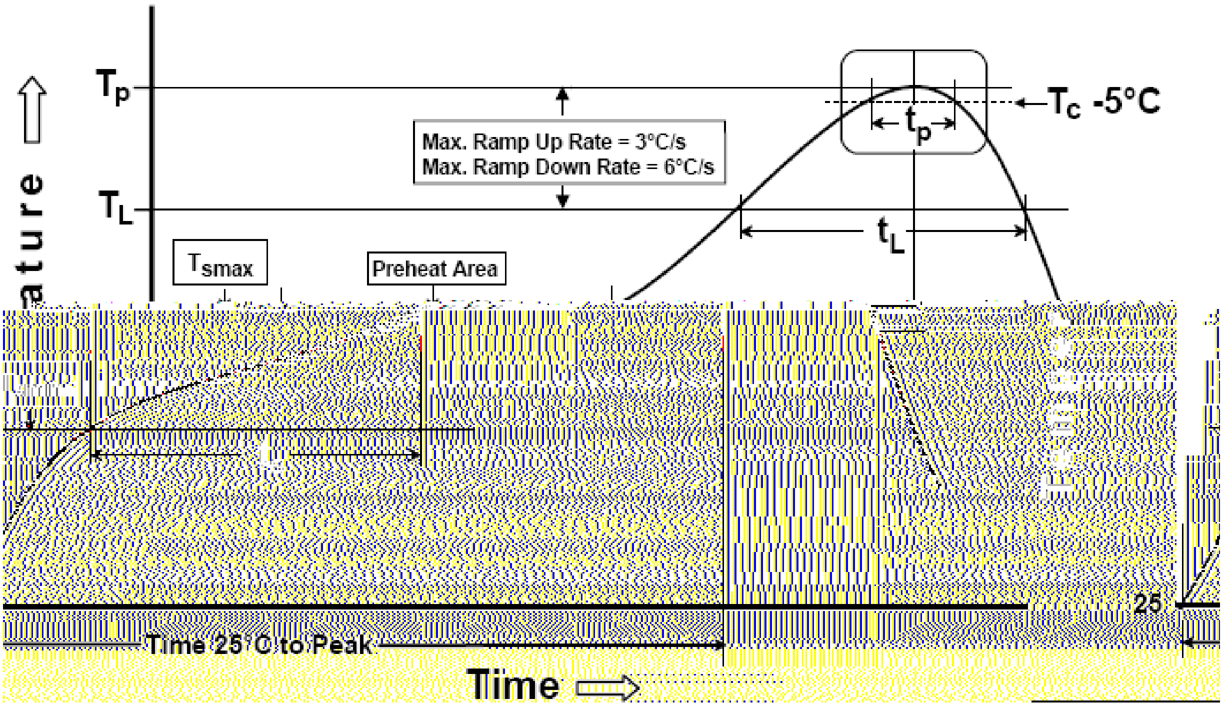
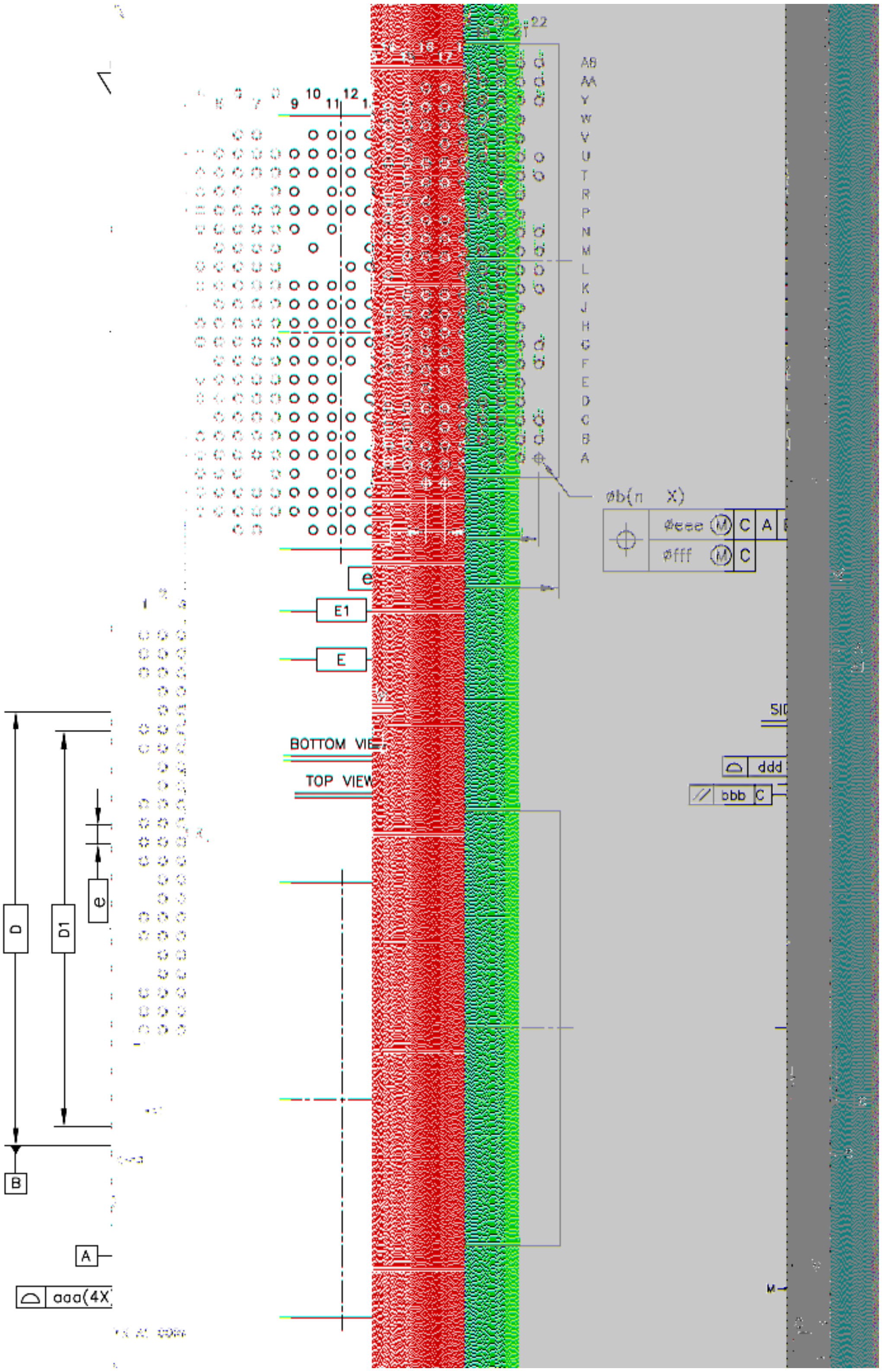


Figure 13. Soldering Temperature Profile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AB
AA
Y
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V
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M
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K
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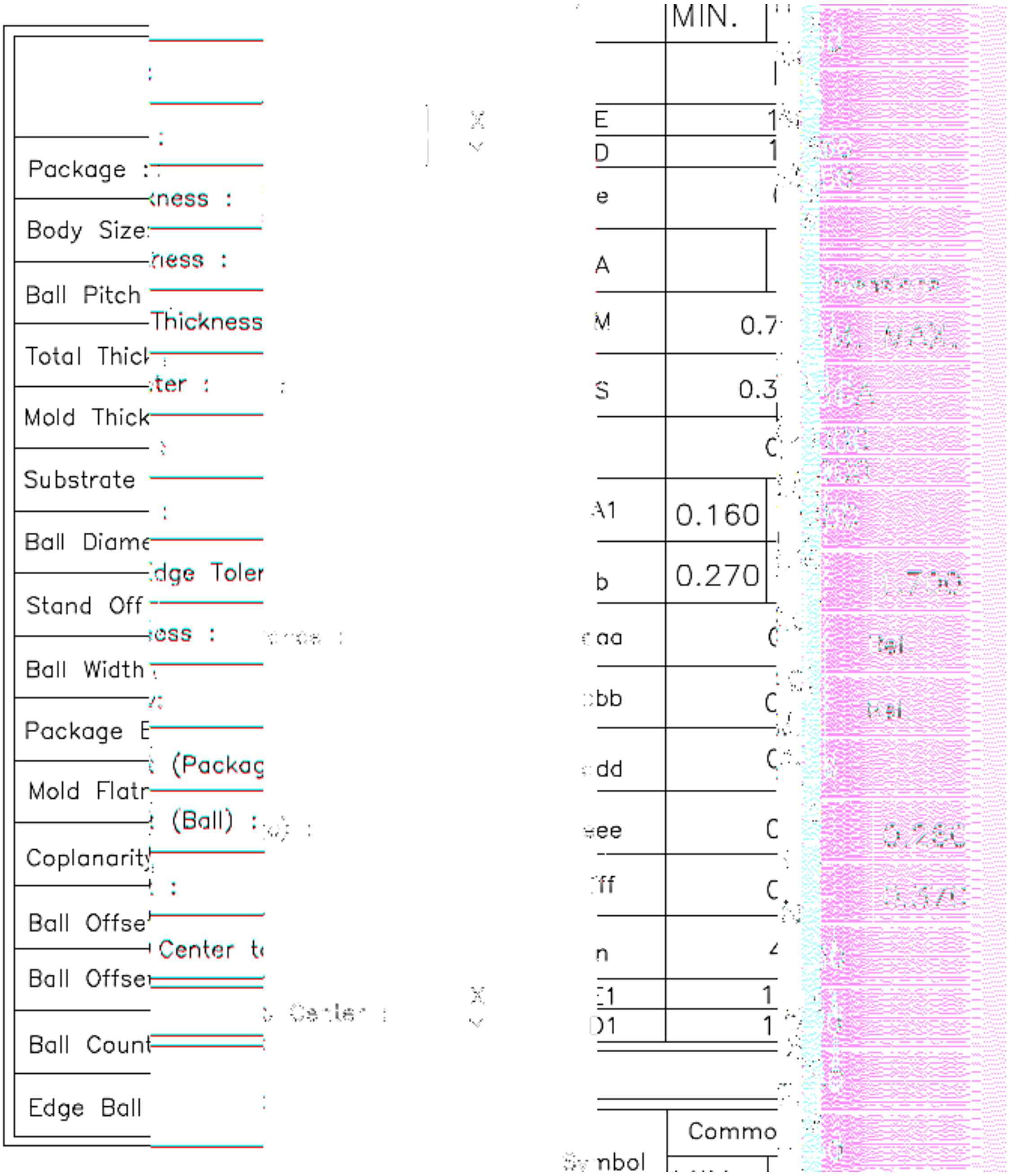
E
D
C
B
A
øb(n X)
øeee M C A B
øfff M C
e
E1
E
BOTTOM VIEW
TOP VIEW
ddd
bbb C
D
D1
e
B
A
aaa(4X)

25.1. M D N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Ball Pitch
Total Thick
Mold Thick
Substrate
Ball Diame
Stand Off
Ball Width
Package E
Mold Flatr
Coplanarity
Ball Offse
Ball Offse
Ball Count
Edge Ball
ness :
ness :
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E1
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0.270
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Commo
Symbol
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Table 37. Ordering Information