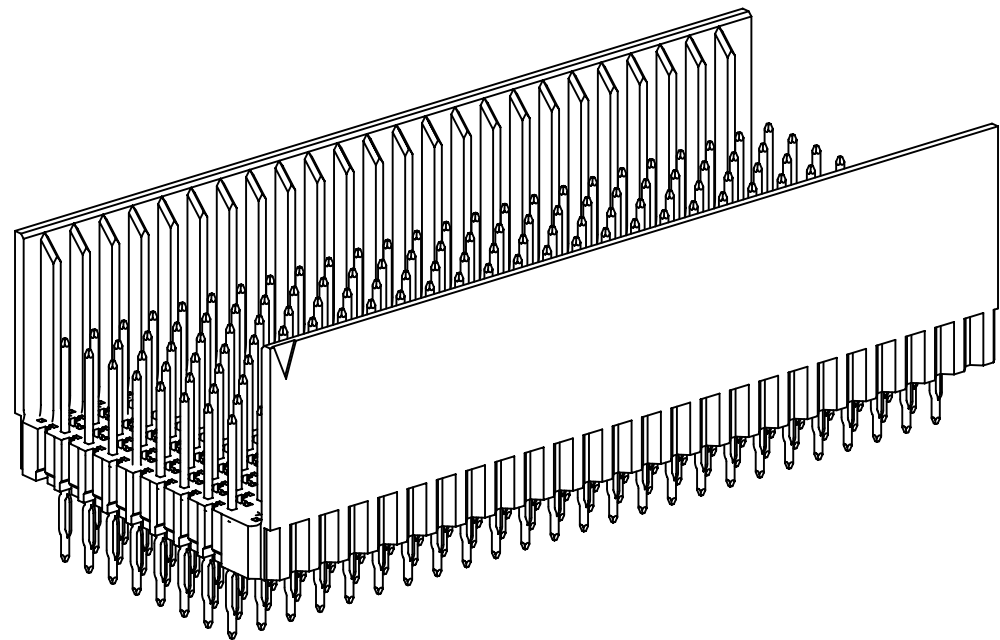
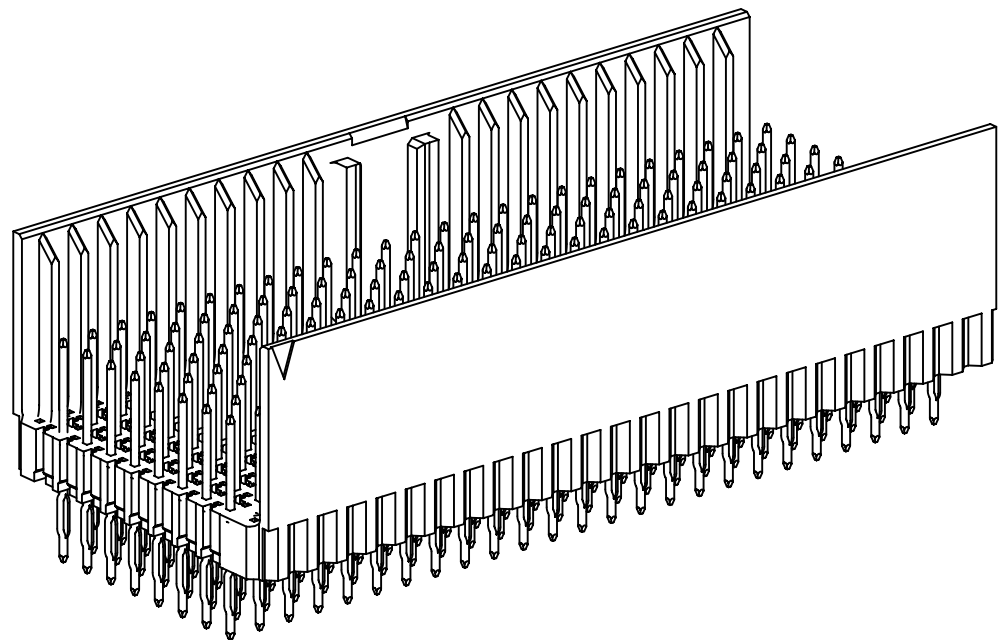


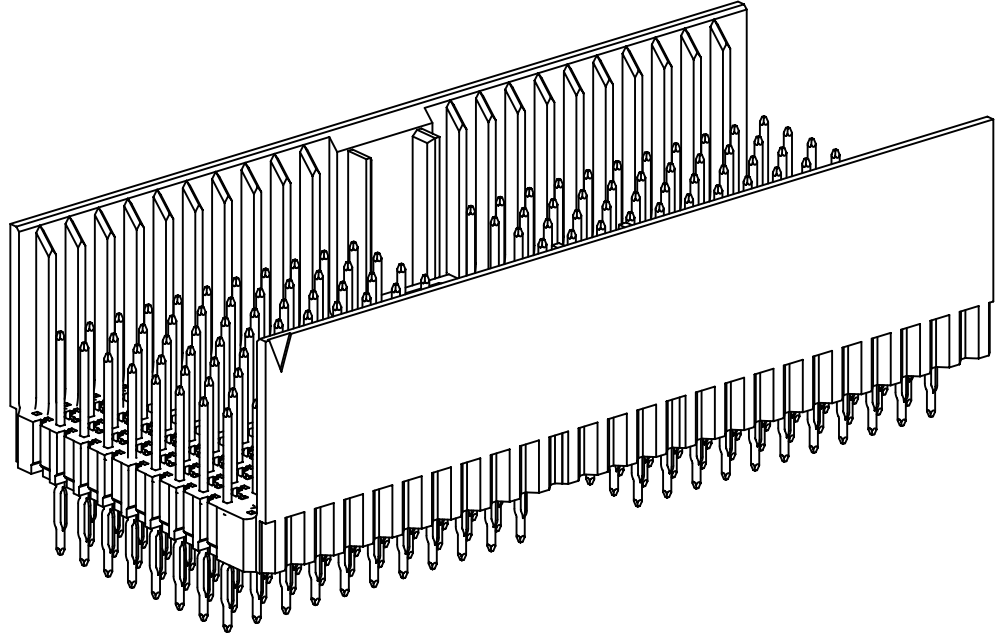
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS



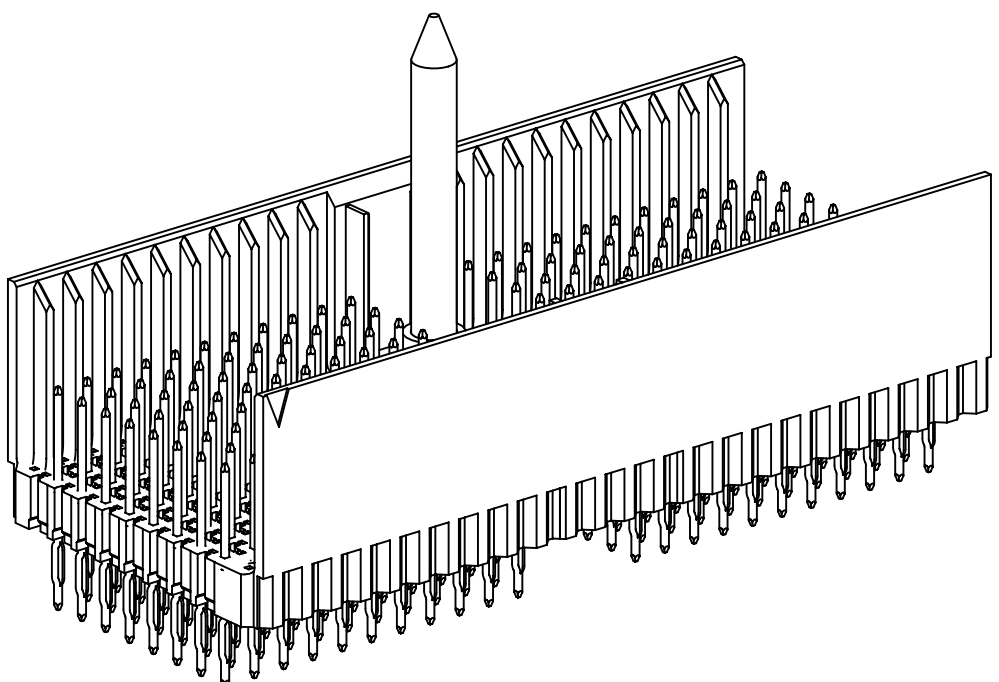
HM-H200E1-8CX1
HM-H244E2-8BX1



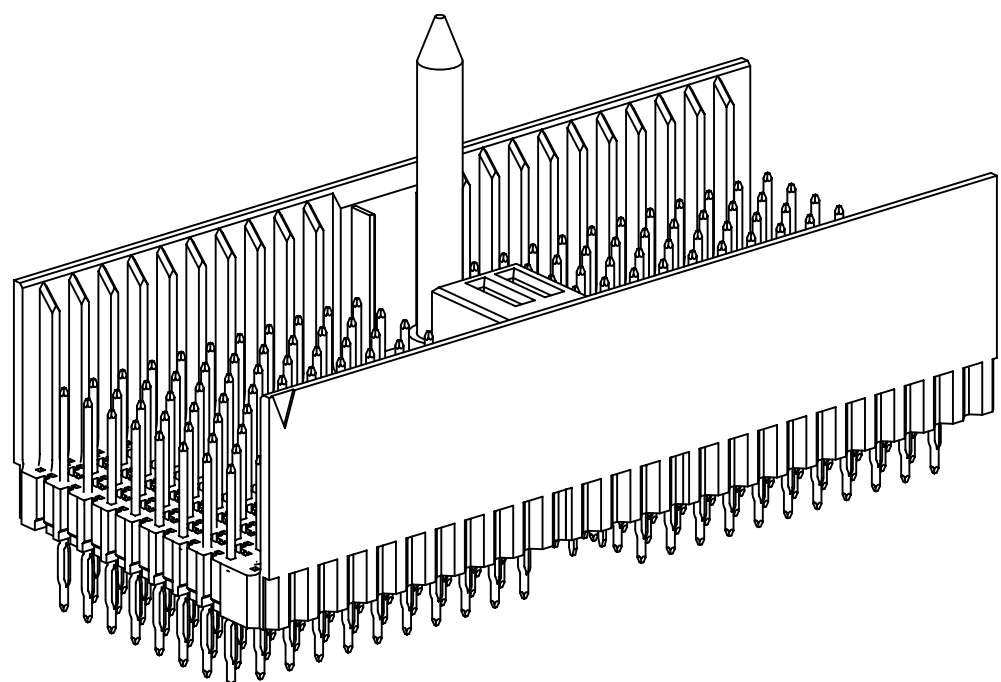
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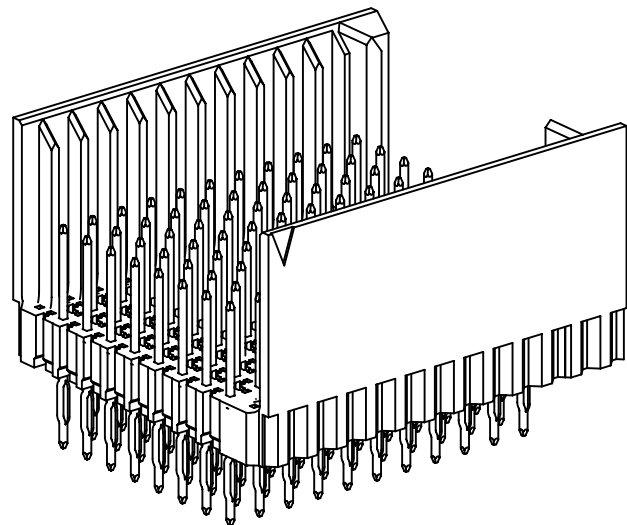
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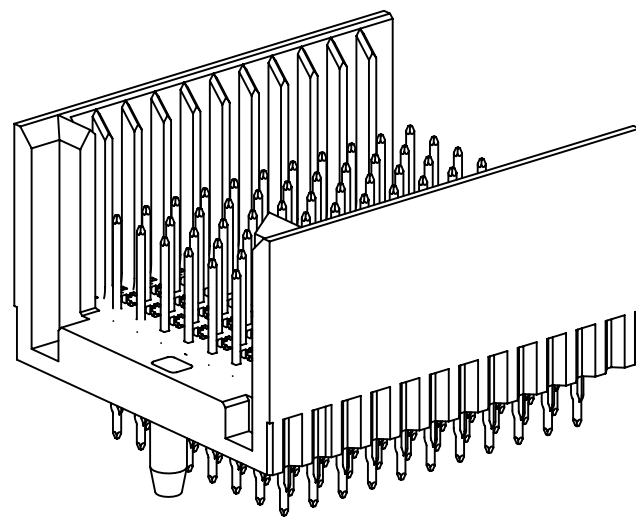
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HM-H220DG2-8BX1



HM-H176DPWR1-8CX1
HM-H220DPWR2-8BX1



HM-H088FL1-8CX1
HM-H110FL2-8BX1



HM-H088FR1-8CX1
HM-H110FR2-8BX1

(UNLESS OTHERWISE SHOWN)
ORDERING INFORMATION
(ROWS 1 AND Z NOT LOADED)

HM-HXXXXX1-8CX1-XXXXX

HEADER POSITION AND TYPE

TAIL STYLE:
P = PRESS-FIT TAIL
S = SOLDER TAIL

PLATING

(UNLESS OTHERWISE SHOWN)
ORDERING INFORMATION
(ROWS 1 AND Z LOADED, 8.3MM MATE LENGTH)

HM-HXXXXX2-8BX1-XXXXX

HEADER POSITION AND TYPE

TAIL STYLE:
P = PRESS-FIT TAIL
S = SOLDER TAIL

PLATING

PLATING SPECIFICATIONS:

TG30L = .76µM [30µIN] MIN. GOLD ON CONTACT AREA, LUBRICATED
2.54µM [100µIN] MIN. TIN/LEAD ON TERMINAL AREA (RIA C2 & E2 APPLY)
1.27µM [50µIN] MIN. NICKEL ALL OVER.
TYPICALLY HIGHER MAKE ORDER QUANTITIES AS COMPARED TO TG30.

TG30 = .76µM [30µIN] MIN. GOLD ON CONTACT AREA
2.54µM [100µIN] MIN. TIN/LEAD ON TERMINAL AREA (RIA C2 & E2 APPLY)
1.27µM [50µIN] MIN. NICKEL ALL OVER.
STANDARD OPTION.

TG50 = 1.27µM [50µIN] MIN. GOLD ON CONTACT AREA, LUBRICATED
2.54µM [100µIN] MIN. TIN/LEAD ON TERMINAL AREA (RIA C2 & E2 APPLY)
1.27µM [50µIN] MIN. NICKEL ALL OVER.
NON-STANDARD OPTION (AVAILABLE WITH LONGER LEAD TIMES AND HIGHER MAKE ORDER QUANTITIES, MOQ)

KR = .76µM [30µIN] MIN. GOLD ON CONTACT AREA
2.54µM [100µIN] MIN. MATTE TIN ON TERMINAL AREA (RIA C2 & E2 APPLY)
1.27µM [50µIN] MIN. NICKEL ALL OVER.

- * MODULAR/SCALABLE FORMAT IEC 61076-4-101
- * PRESS-FIT OF SOLDER TAIL VERSION
- * 101 MATED LINES PER INCH
- * SHIPS WITH PROTECTIVE CAP, WHICH ALSO SERVES AS AN INSERTION TOOL
- * END-TO-END STACKABLE WITH 8 ROW 3M™ HM AND HSHM PRODUCTS
- * INTEGRATED GUIDE AND GUIDE PIN
- * MULTI-PURPOSE CENTER (MPC) KEYING AND GUIDANCE
- * FOUR INTEGRATED 8.25 A POWER CONTACTS AND GUIDE PIN

- NOTES
1. MATERIAL:
PLASTIC: HIGH TEMP LCP, UL94V-0
PINS: COPPER ALLOY.
 2. REGULATORY INFORMATION:
ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY)
 3. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

3 MECHANICAL:

NORMAL FORCE (NOMINAL): .57N [58g] SIGNAL
ENGAGEMENT FORCE (NOMINAL): .32N [33g] SIGNAL
SEPARATION FORCE (NOMINAL): .20N [20g] SIGNAL
WIPE (NOMINAL, SHORTEST CONTACT): 2.67 [.105] SIGNAL
MATE/UNMATE CYCLES: 250
APPLICATION: THIS MODULE IS NOT SUITABLE FOR STAND-ALONE USE. (REFER TO IEC-61076-4-101)

3 ELECTRICAL:

CURRENT RATING (FULLY LOADED): 1A @ 70°C SIGNAL
INSULATION RESISTANCE: $1 \times 10^4 \text{ M}\Omega$ @ 100 V_{DC}
WITHSTANDING VOLTAGE: 750V_{RMS}

3 ENVIRONMENTAL:

TEMPERATURE RATING: -55°C TO 125°C
PROCESS RATING: MAX. 260°C (PER J-STD-020C)
WITHSTANDING VOLTAGE: 1 (PER J-STD-020C)

3M™ ELECTRONIC SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

3M IS A TRADEMARK OF 3M COMPANY.
FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

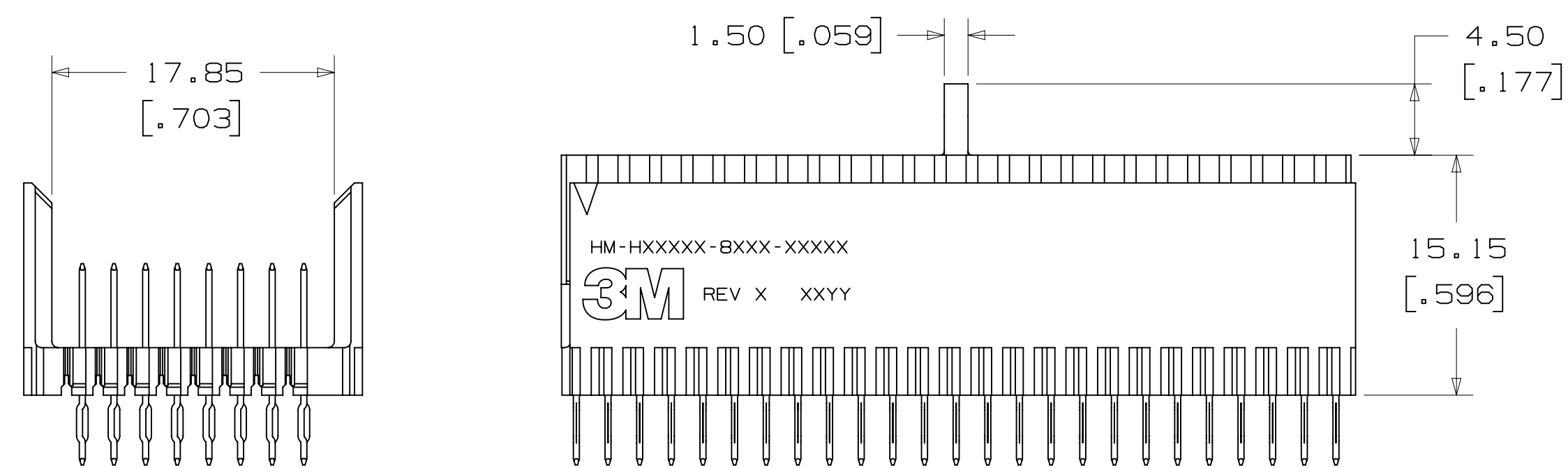
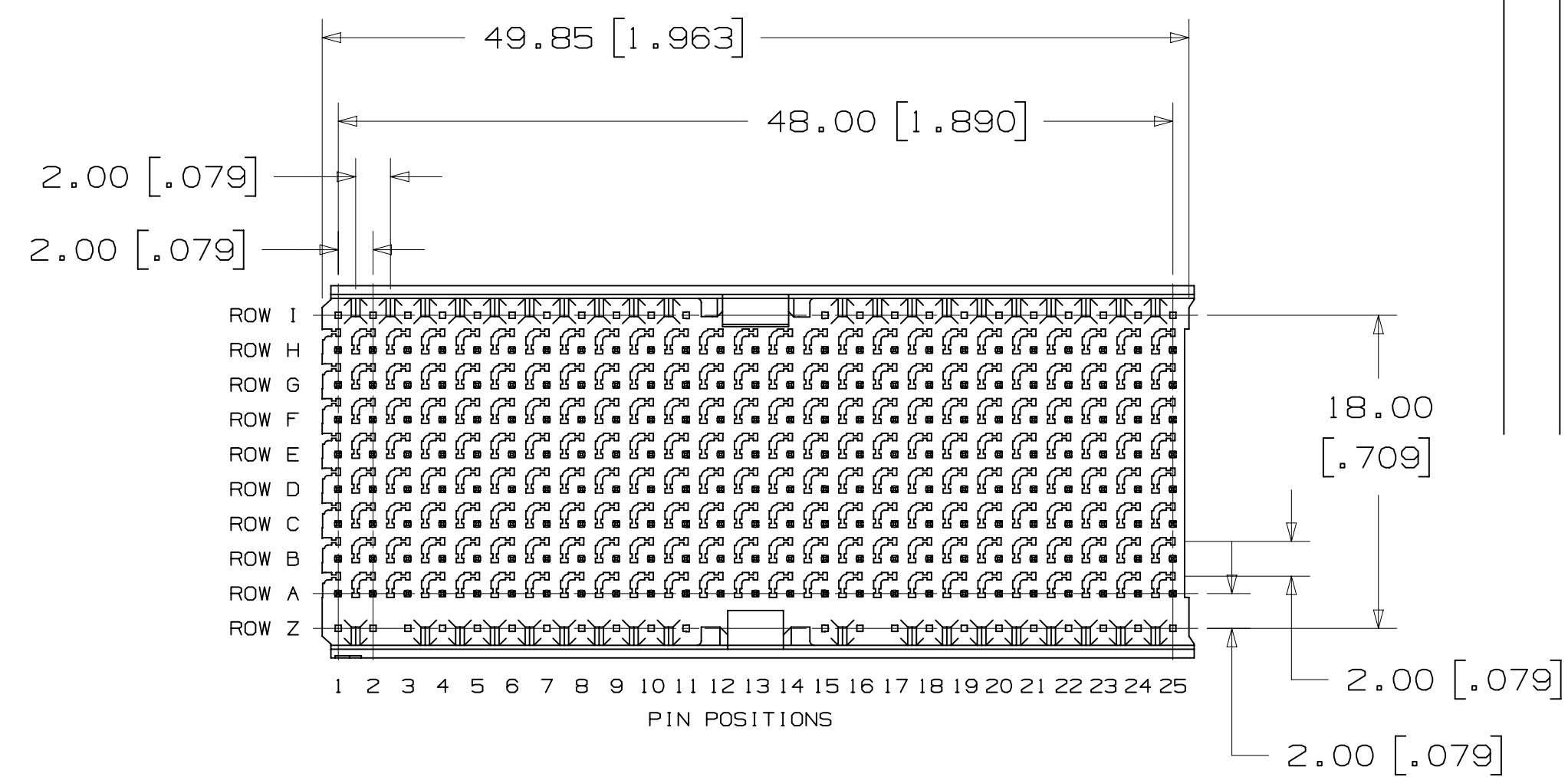
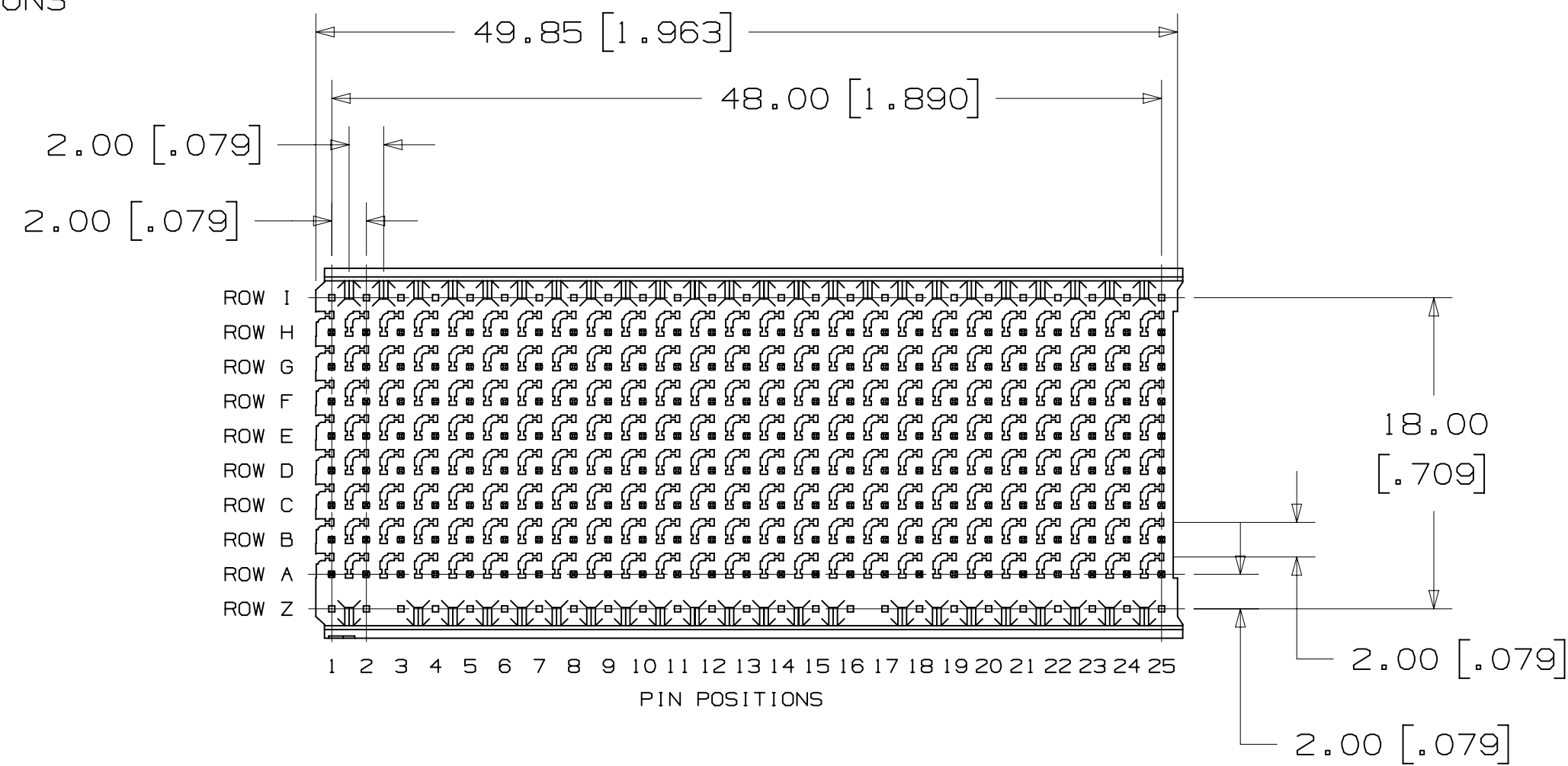
cAUs
UL FILE NO: E68080

DIMENSIONS: MM [INCHES]		A	39815	MAR 28,2012		JNC	TS
DESIGN REFERENCE		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
NEXT ASSEMBLY		DATE		MFG		DATE	
DIVISION		DATE		APPROV		DATE	
Interconnect Solutions		MAR 28,2012		T. SUNIGA		MAR 28,2012	
DO NOT SCALE DRAWING		SCALE 5/2		TOLERANCES EXCEPT AS NOTED		INCHES	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		MAX SURFACE ROUGHNESS	
MAX SURFACE ROUGHNESS		SURFACES		MARKED ONLY		ANGLES	
TITLE		CAGE NUMBER		SIZE		DRAWING NO.	
HM PRESS-FIT HEADER, 8-ROW, HM SERIES		D		78-5100-2517-0		REV. A	
MODEL		DET		YES		SHT 1 OF 4	

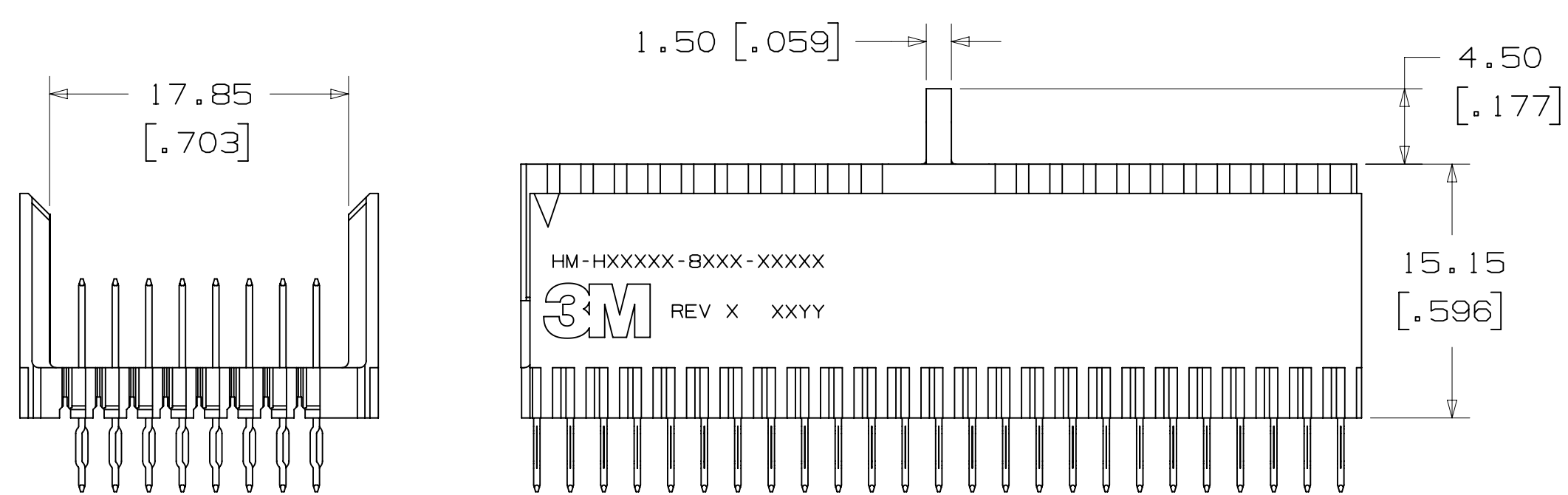
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES

NOTE

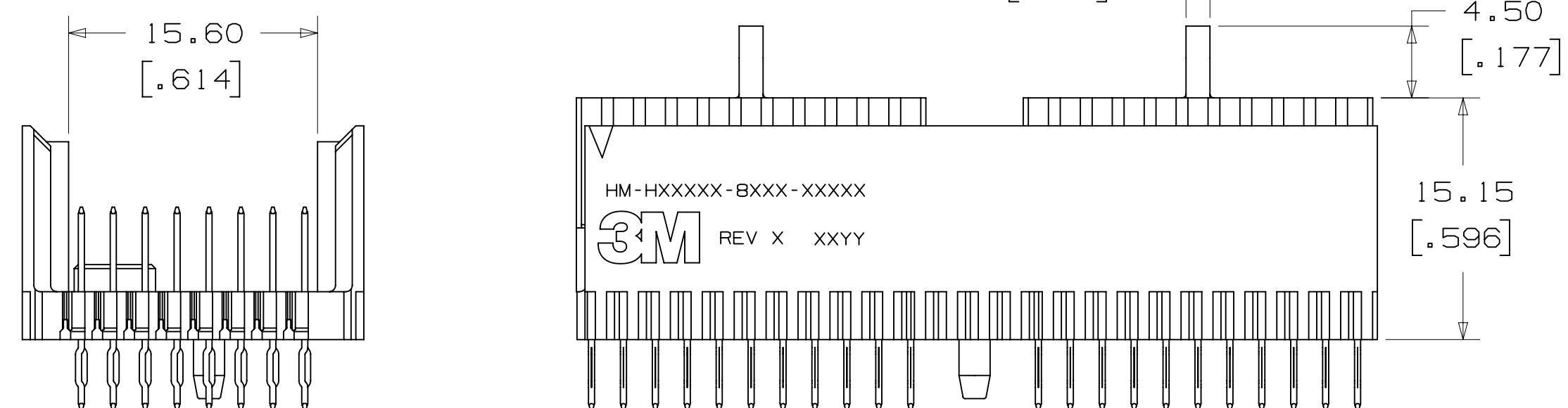
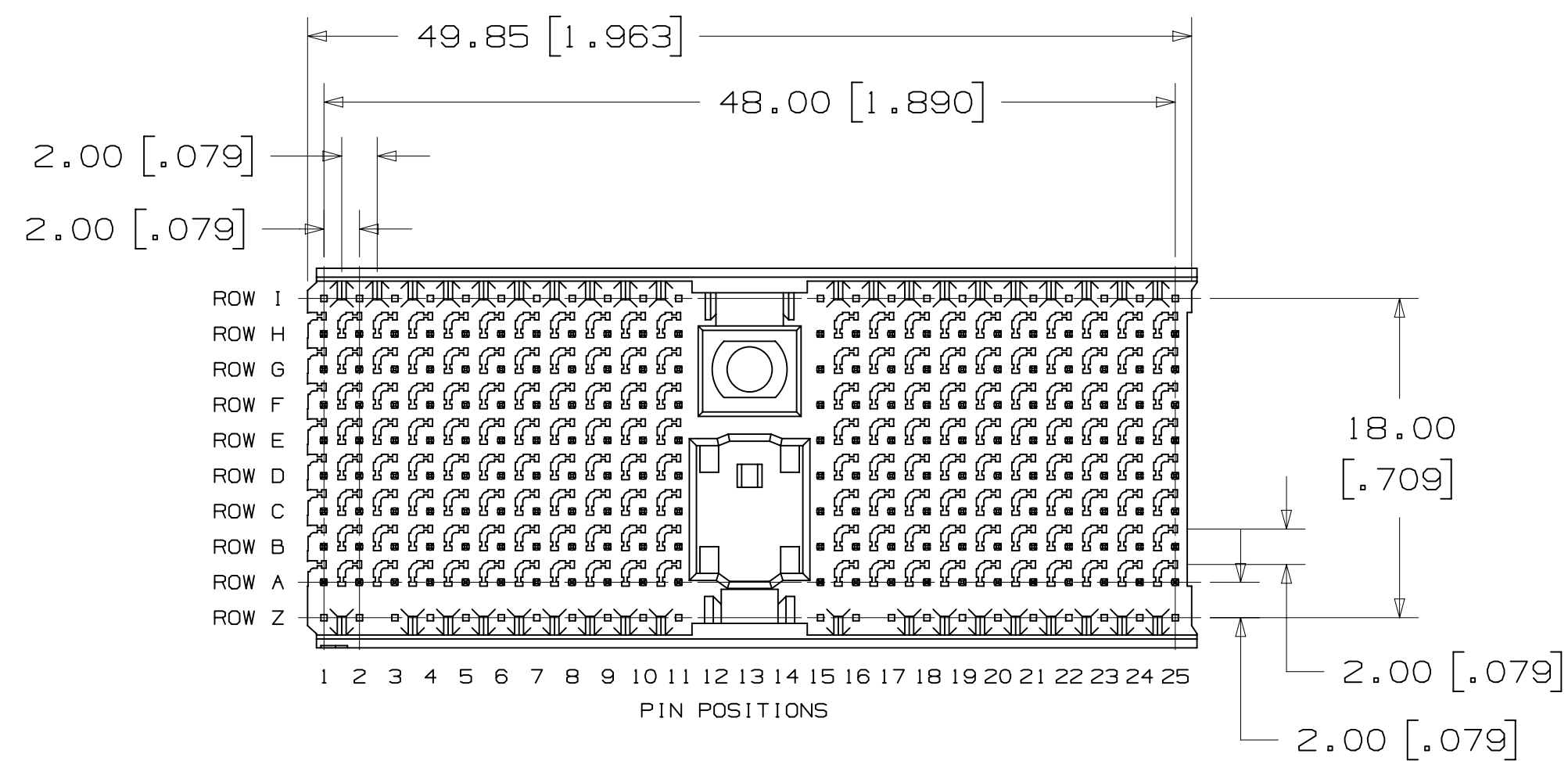
1 CAPS TO BE REMOVED AFTER
PRESS-FIT INSTALLATION PROCESS.



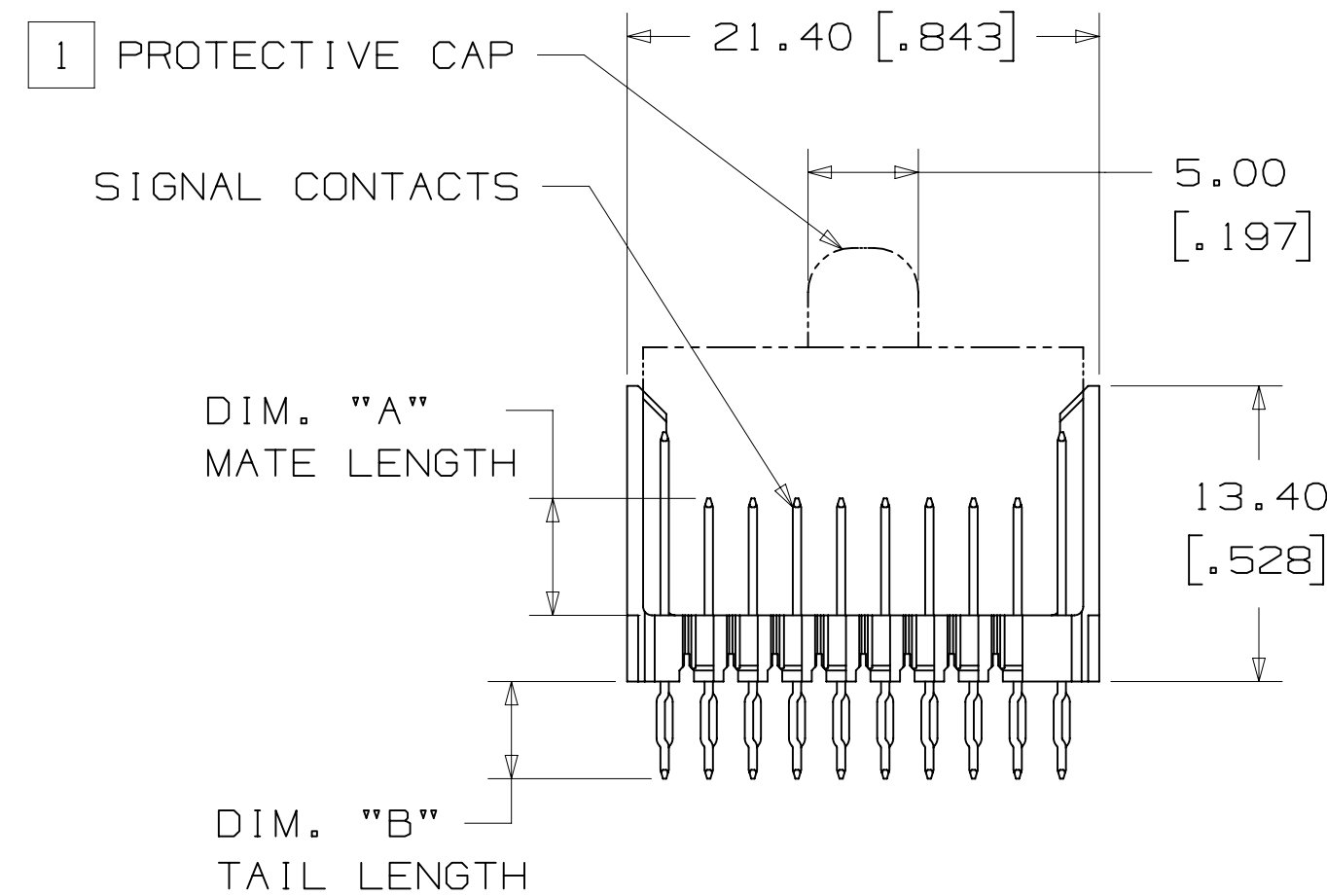
HM-H200E1-8CX1
HM-H244E2-8BX1



HM-H200DE1-8CX1
HM-H244DE2-8BX1



HM-H176D1-8CX1
HM-H220D2-8BX1

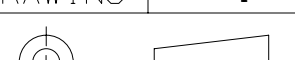


TYPICAL SIDE VIEW
DIMENSIONS FOR THE
HEADERS ON THIS DRAWING

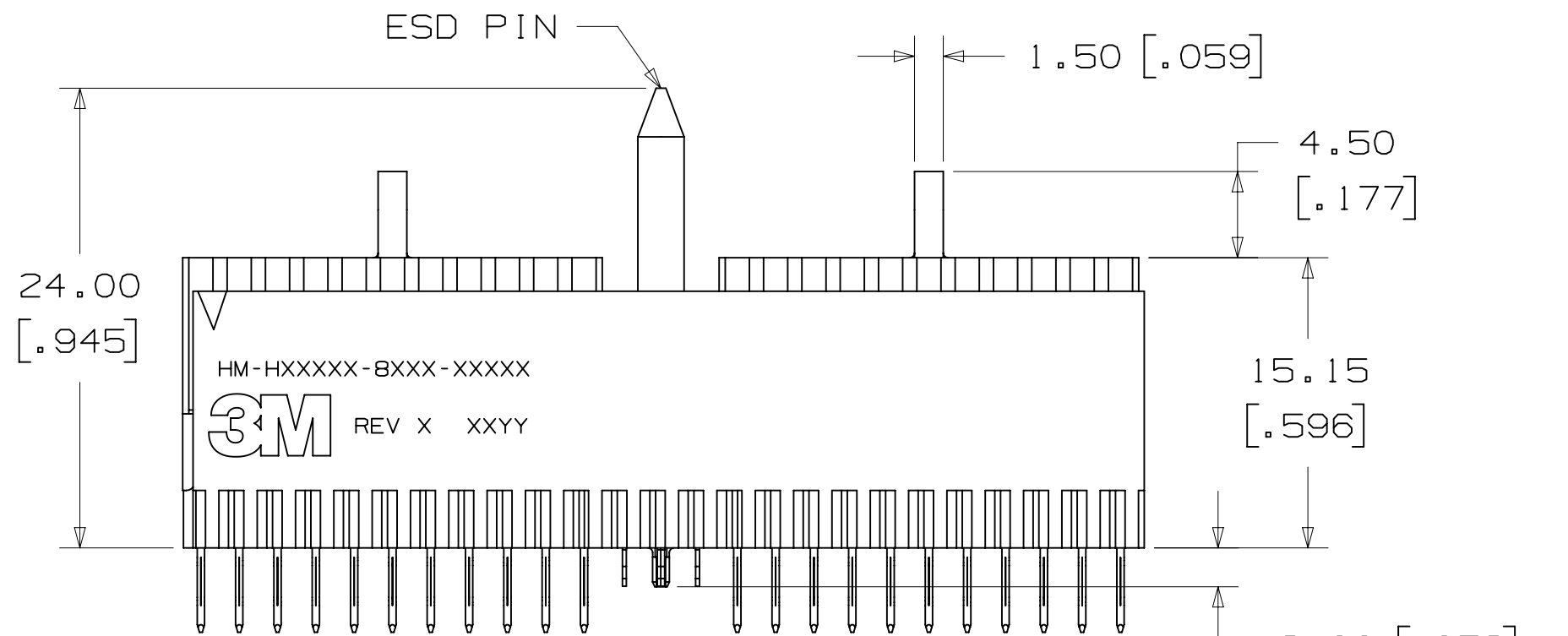
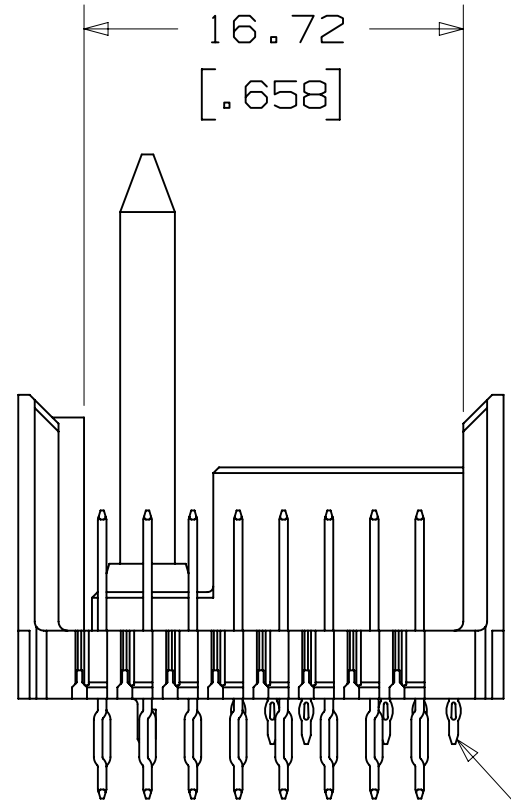
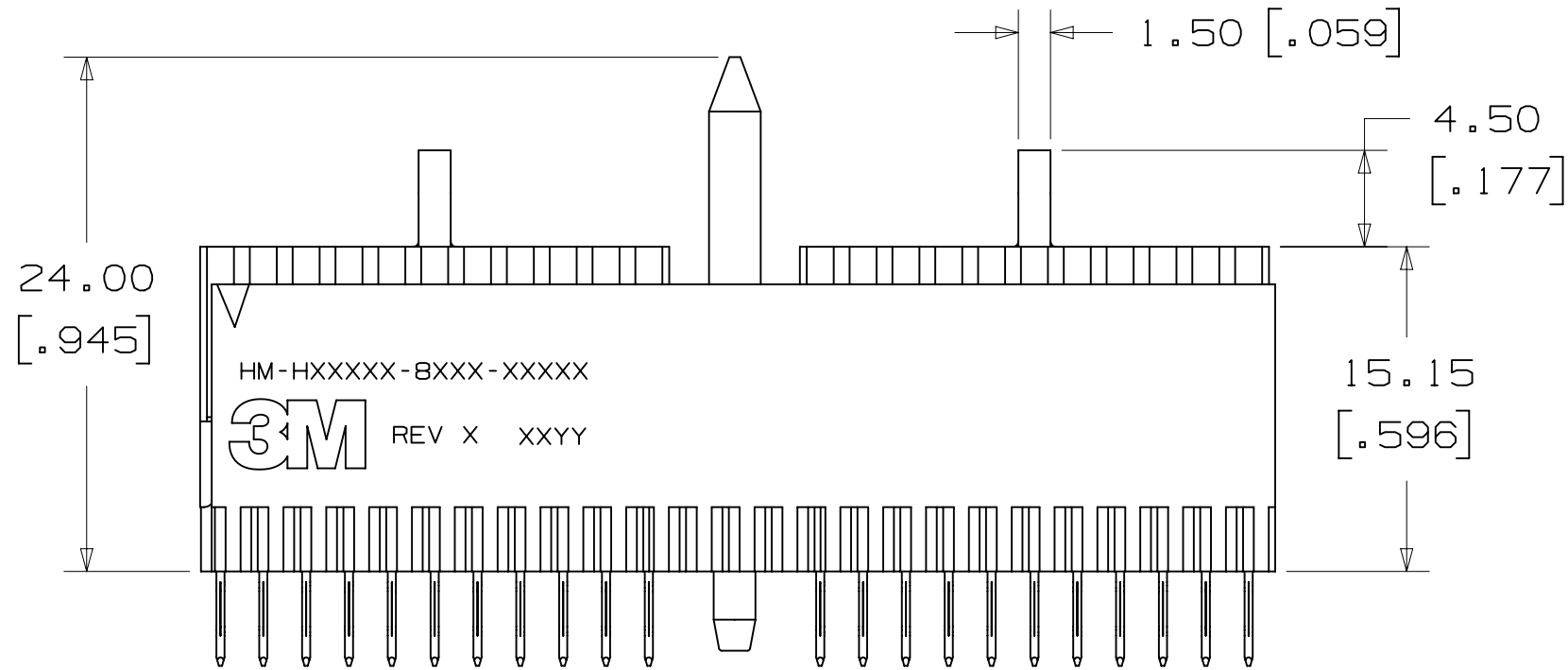
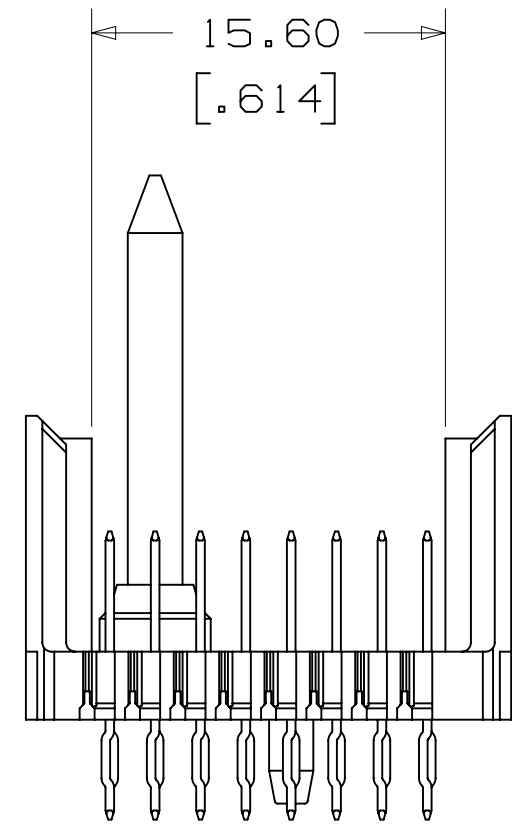
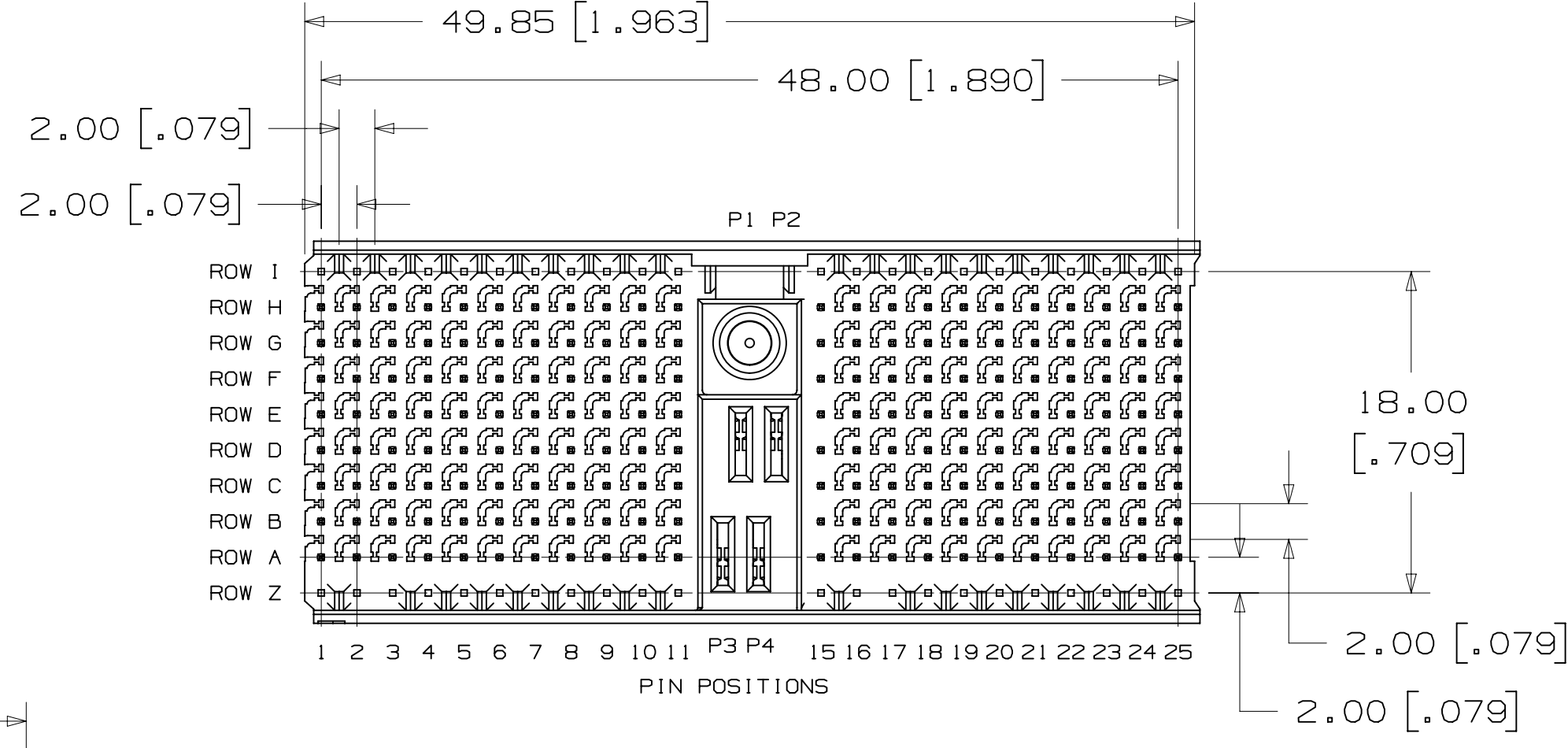
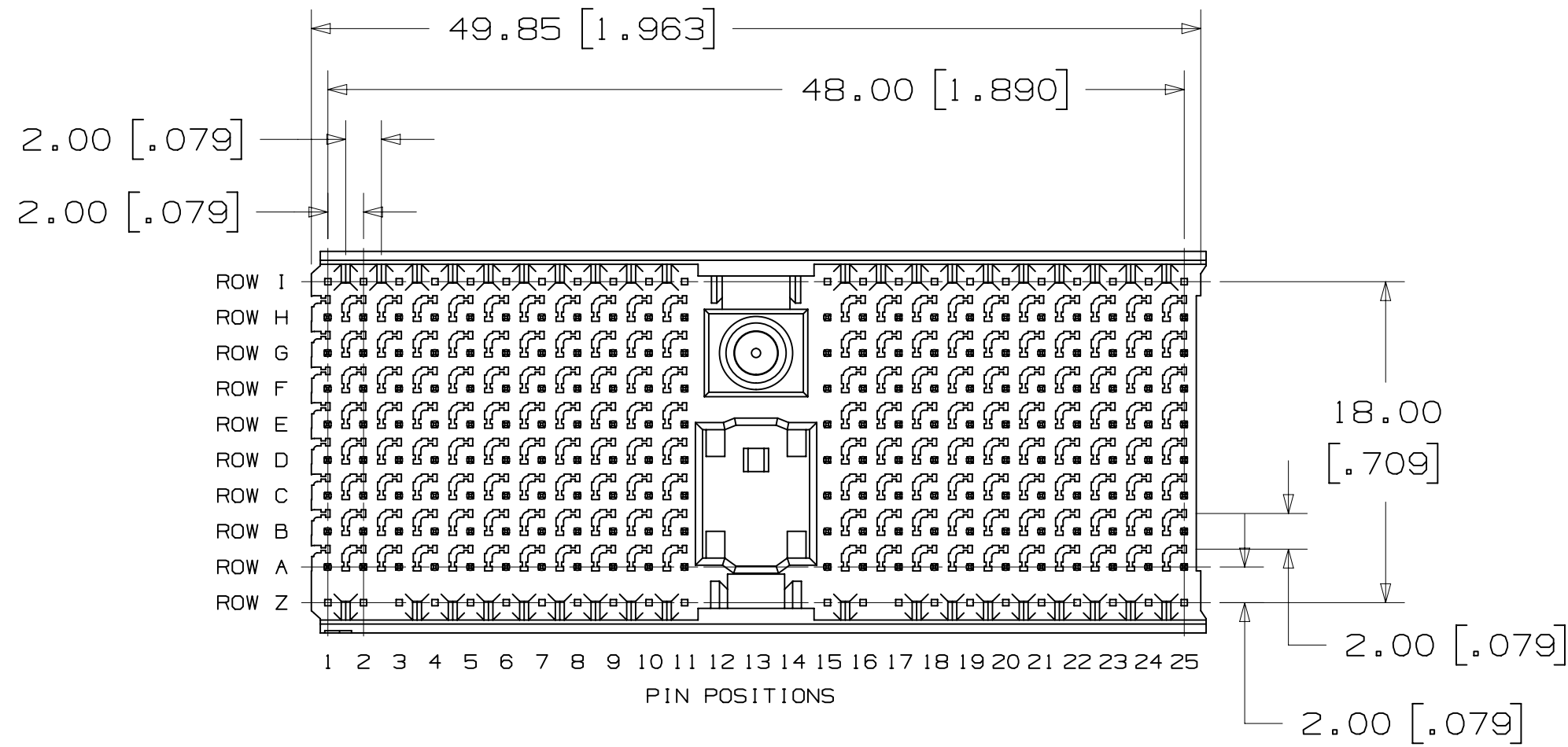
STANDARD CONFIGURATION

DIM. "A"	5.3 [.21]	FOR ROWS A THRU H
DIM. "B"	4.4 [.17]	EXCEPT AS NOTED

FOR NON-STANDARD CONFIGURATIONS
CONTACT A 3M SALES REPRESENTATIVE

A		39815		MAR 28, 2012		JNC		TS	
PRODUCTION RELEASE									
REVISION		ECO		ISSUE DATE AND DESCRIPTION		DRAFT		CHKD	
001		CASTIGLIONE		MAR 28, 2012		MFG		DATE	
CHKD				DATE		APPROVAL		DATE	
						T. SUNIGA		MAR 28, 2012	
DIVISION				DIVISION CODE					
Interconnect Solutions				ISD					
DO NOT SCALE		SCALE		TOLERANCES EXCEPT AS NOTED		 © 3M COPYRIGHT 2012 This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.			
DRAWING		1							
				INCHES		TITLE HM PRESS-FIT HEADER, 8-ROW, HM SERIES			
THIRD ANGLE PROJECTION				.0 ± .00 ± .01 .000 ± .005 .0000 ±					
INTERPRET PER ASME Y14.5 - 1994				MILLIMETERS		CAGE NUMBER SIZE DRAWING NO. D 78-5100-2517-0			
				0 ± .0 ± .3 .00 ± .13 .000 ±					
MAX SURFACE ROUGHNESS				☒ UNFINISHED SURFACES ☐ MARKED ONLY		MODEL DET. LISTS ☐ YES ☒ NO		REV. SHT 2 OF 4	

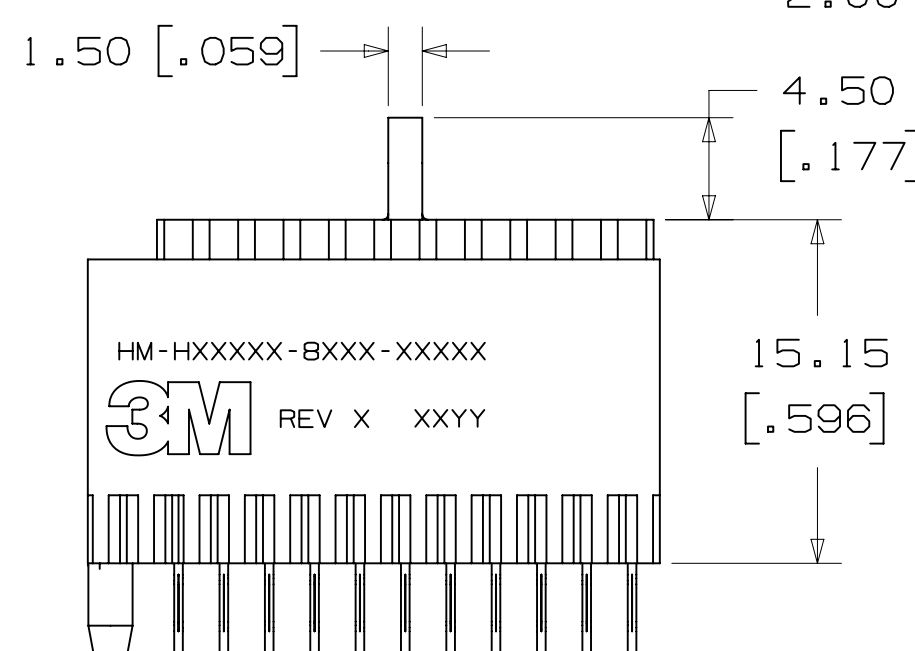
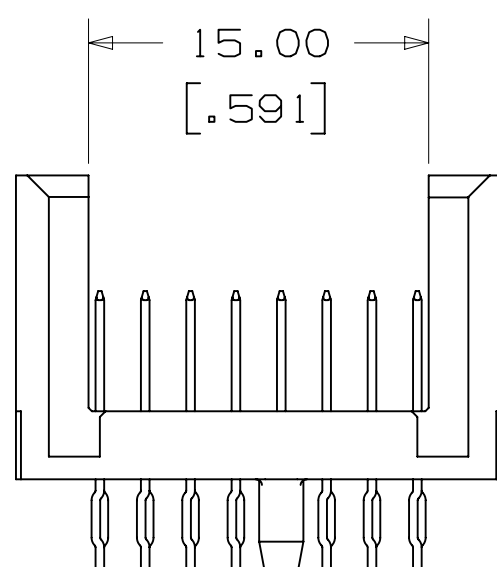
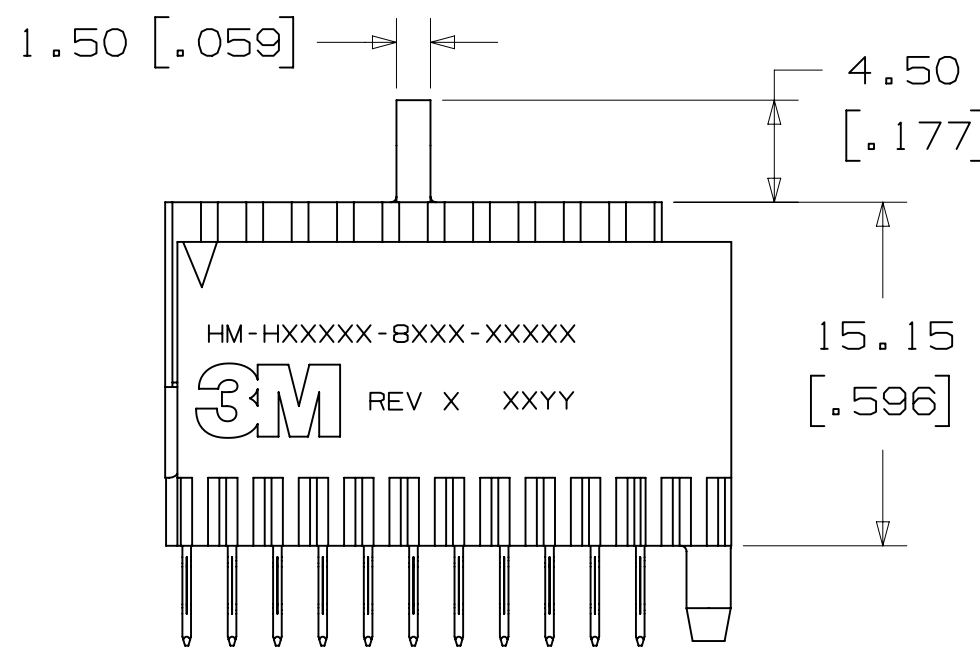
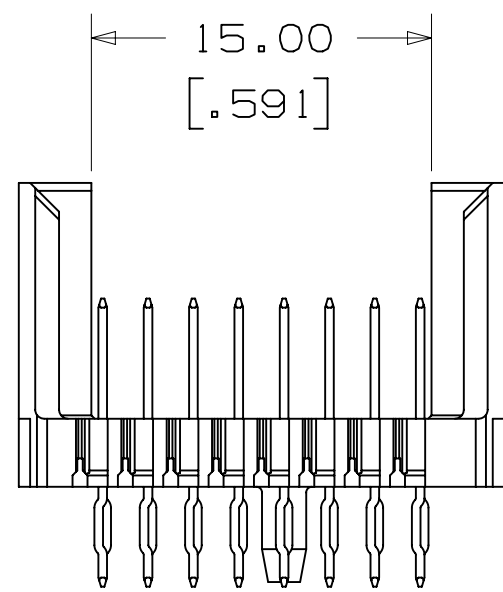
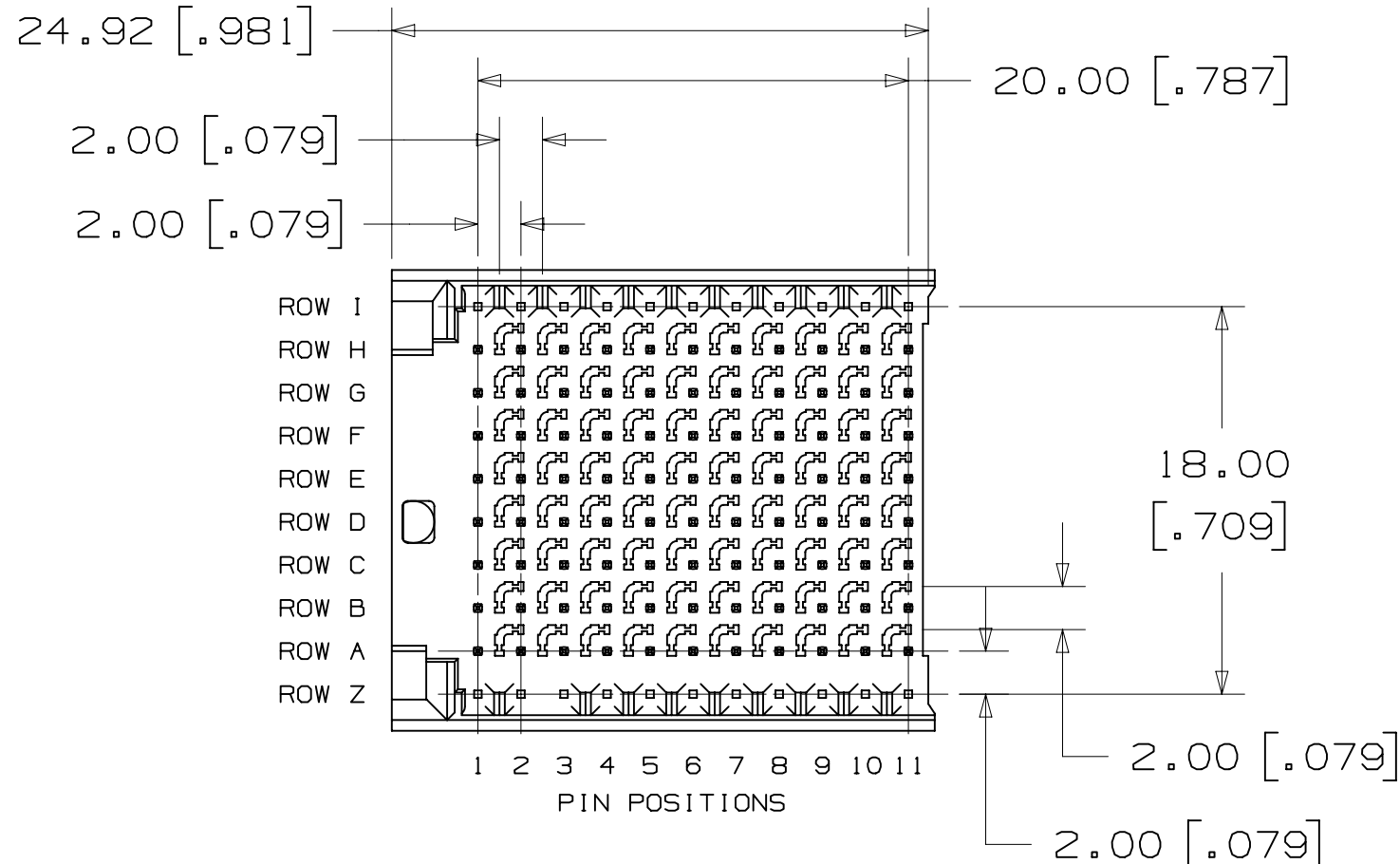
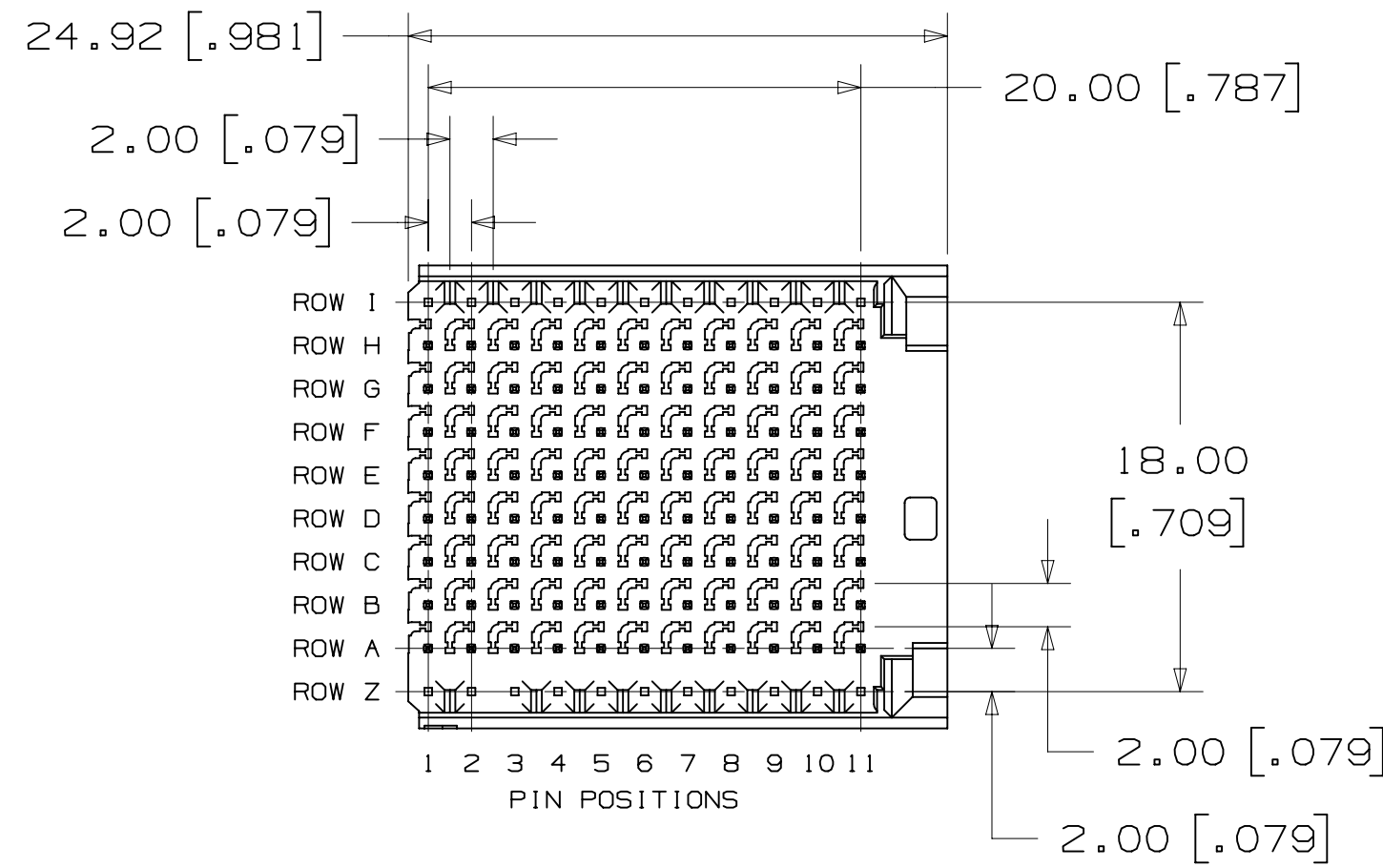
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS



HM-H176DG1-8CX1
HM-H220DG2-8BX1

HM-H176DPWR1-8CXX
HM-H220DPWR2-8BXX

DIM. "B" TAIL LENGTH
1 = 4.4 [.17] PIN, 2.0 [.08] POWER
AND 2.0 [.08] ESD
2 = 4.4 [.17] PIN, 4.4 [.17] POWER
AND 2.0 [.08] ESD

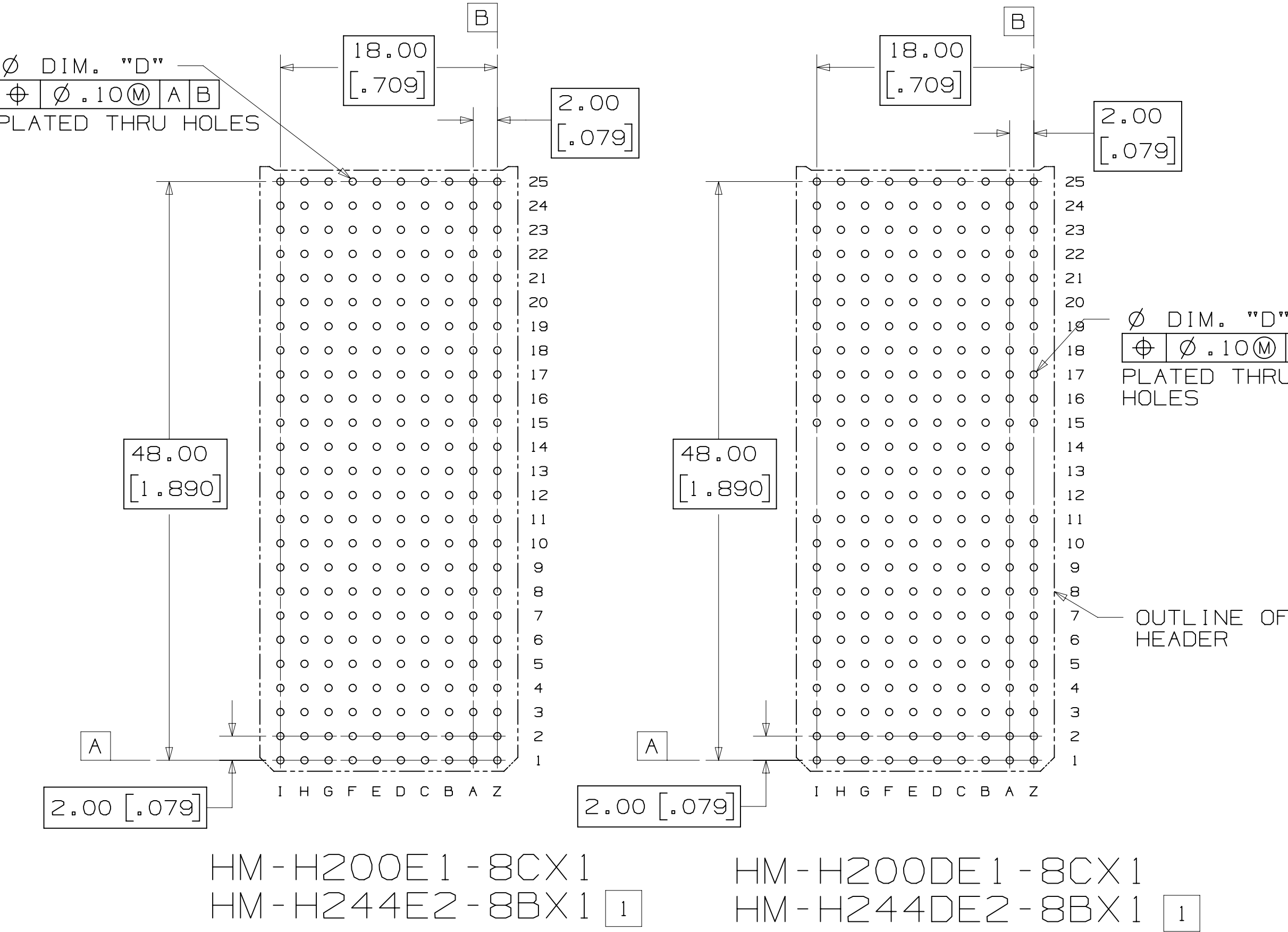


HM-H088FL1-8CX1
HM-H110FL2-8BX1

HM-H088FR1-8CX1
HM-H110FR2-8BXX1

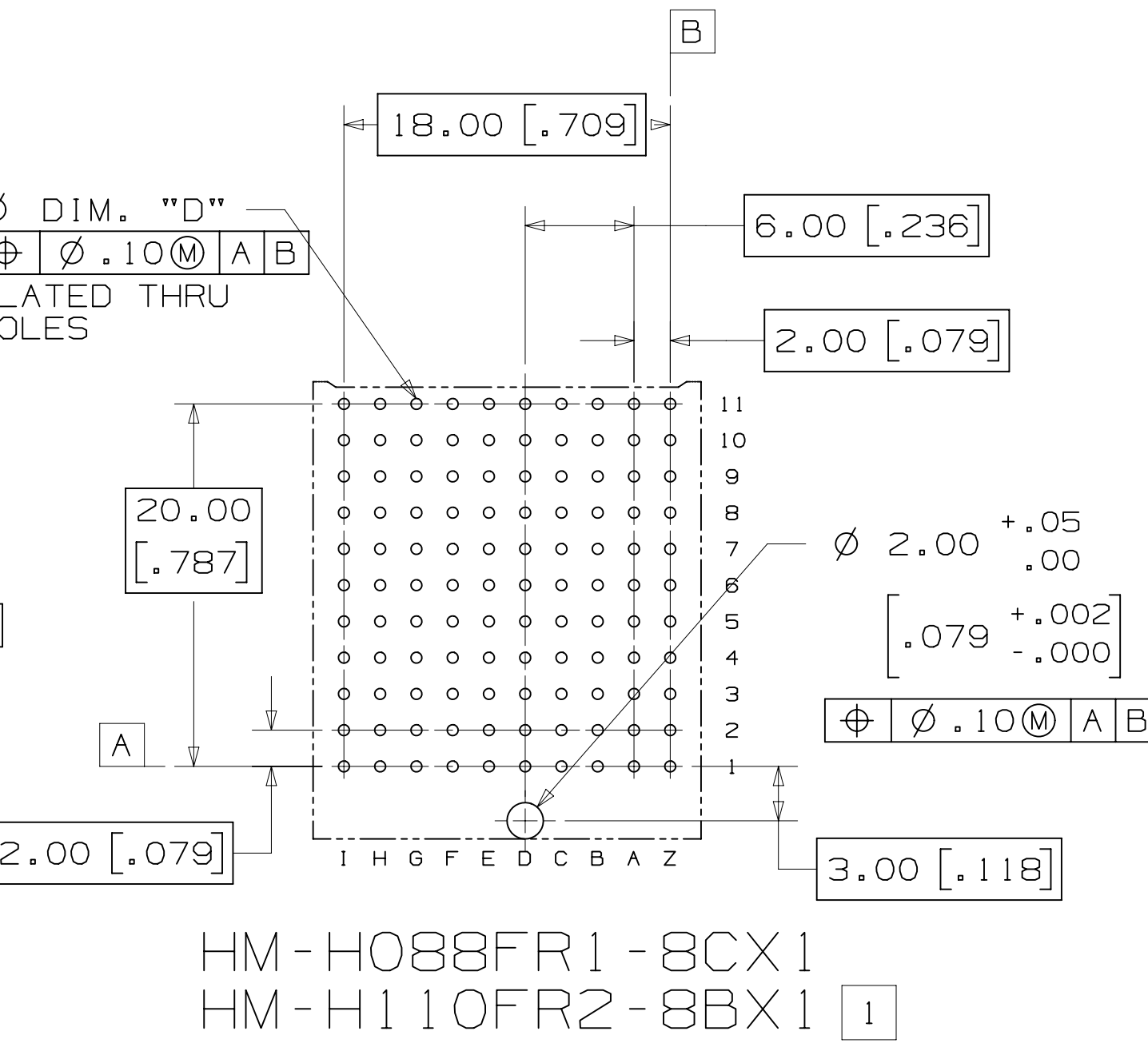
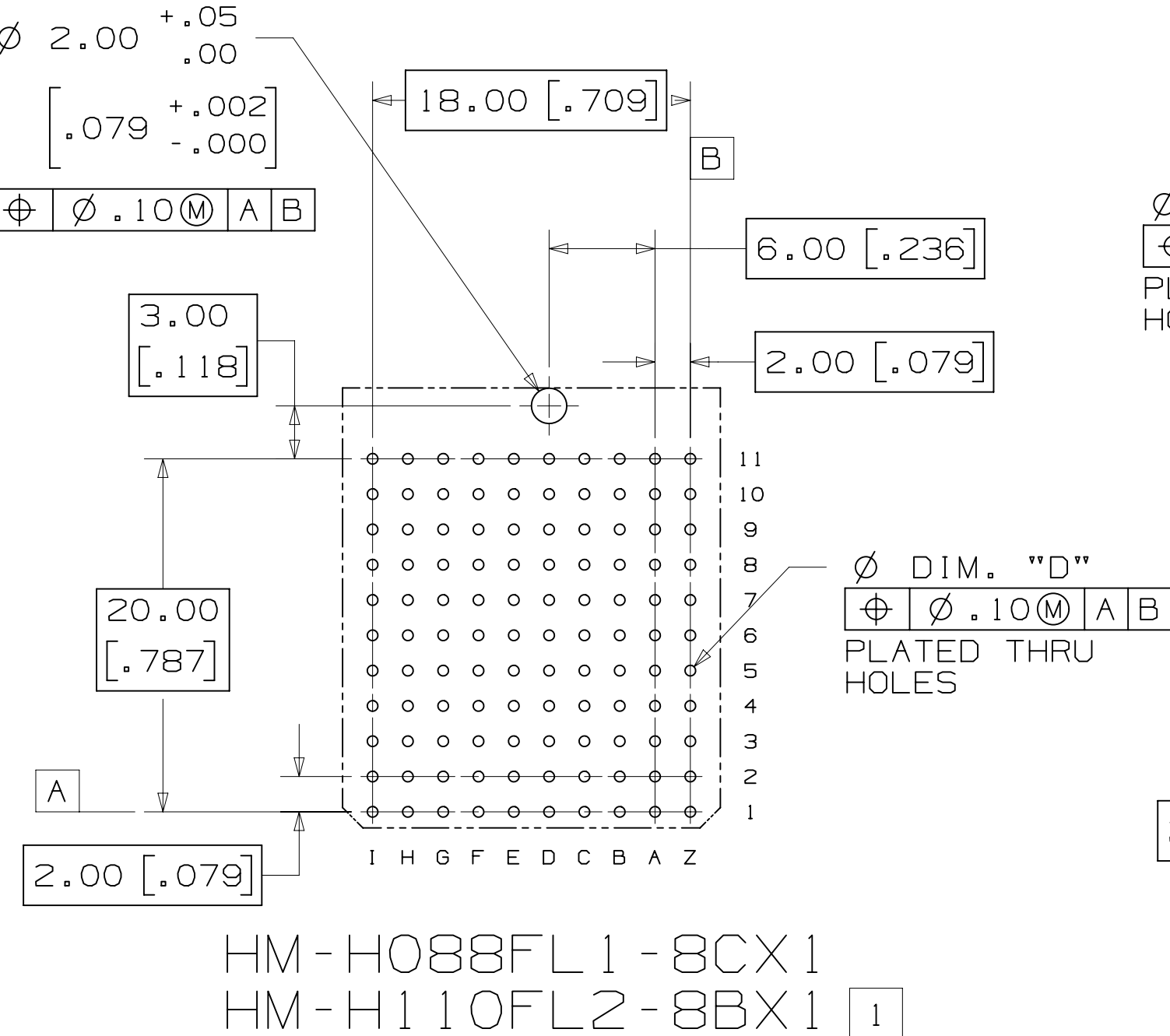
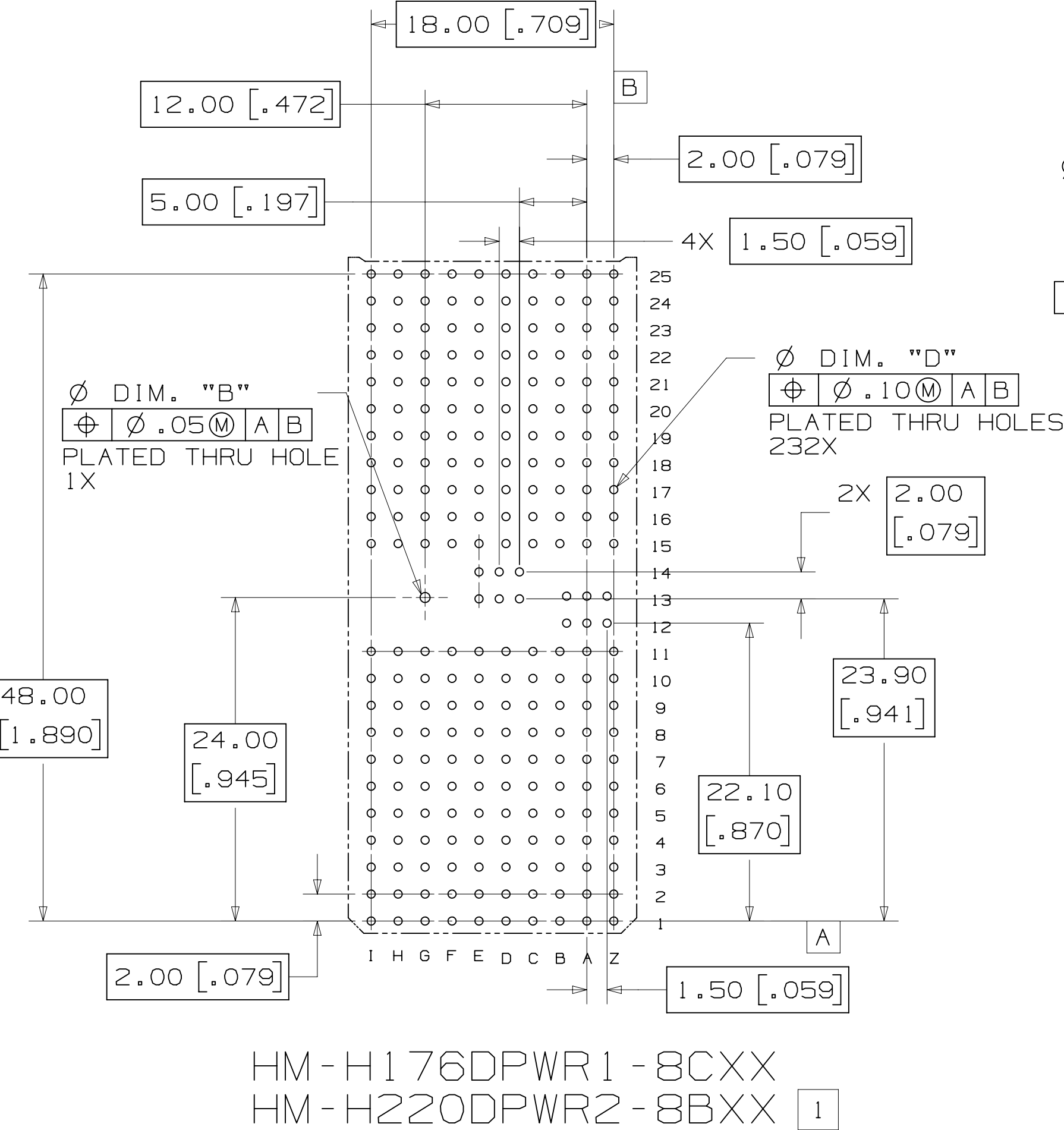
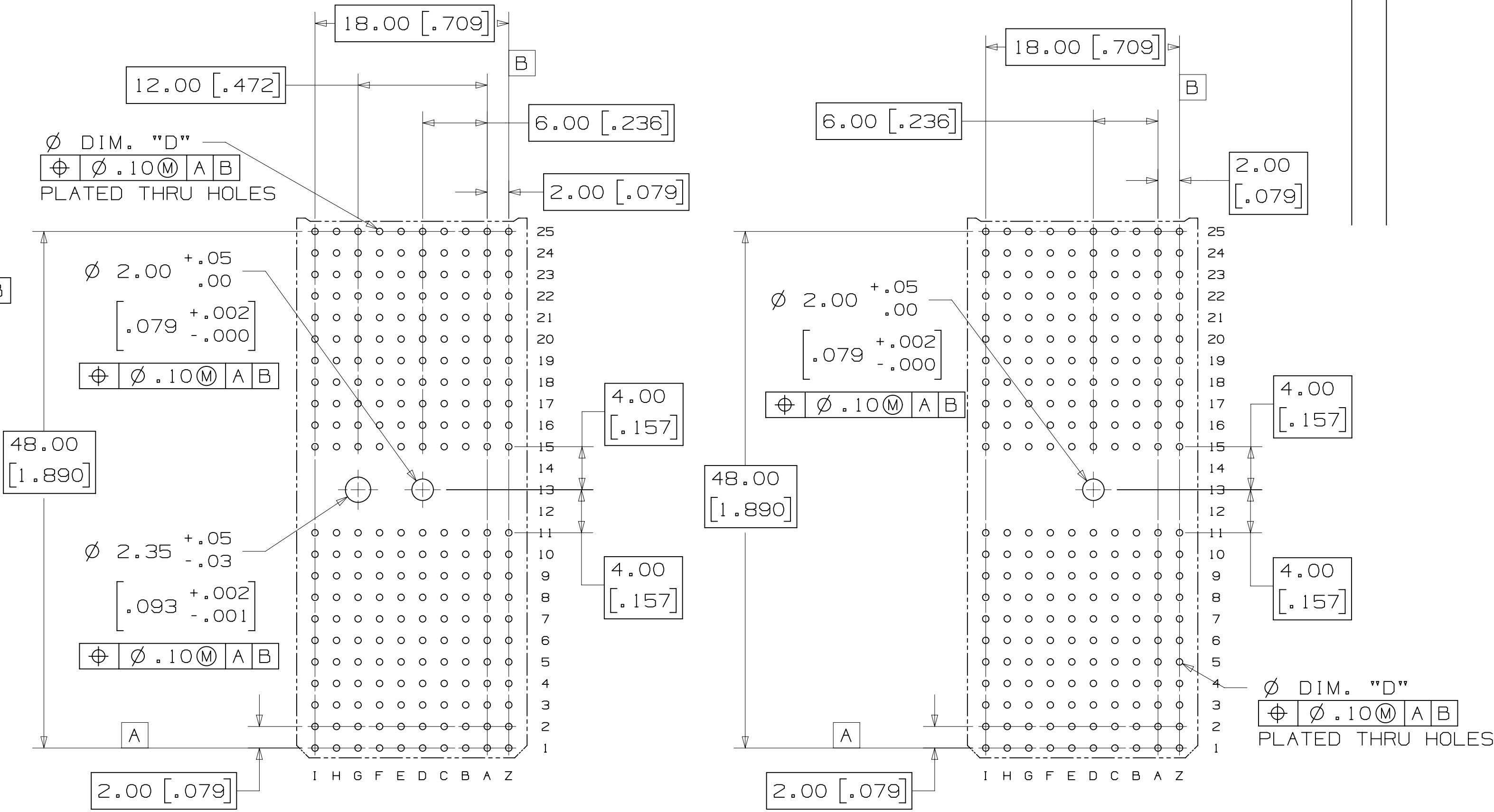
DESIGN REFERENCE		NEXT ASSEMBLY		A 39815		MAR 28, 2012		JNC	TS
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DISTRIB CODES		DIVISION CODE		DATE		MFG		DATE	
CHKD		CHKD		DATE		APPR		DATE	
Interconnect Solutions		ISD		T. SUNIGA		MAR 28, 2012		MAR 28, 2012	
DO NOT SCALE DRAWING		SCALE 3/1		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		0.00 ± .01		0.00 ± .005	
MAX SURFACE ROUGHNESS		0.00 ± .01		0.00 ± .005		0.00 ± .005		0.00 ± .005	
MARKED ONLY		ANGLES		TITLE		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		CAGE NUMBER	
MODEL		SIZE		DRAWING NO.		REV.		SHT 3 OF 4	
DET		LISTS		YES		NO		SHT 3 OF 4	

3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS



HOLE PLATING TABLE				
HOLE	(FINISHED HOLE)	Cu THICKNESS	SnPb THICKNESS	DRILLED HOLE DIA.
DIM. "B"	.690-.790 [.0270-.0310]	.025-.045 [.0010-.0018]	.008-.018 [.0003-.0007]	.810-.860 [.0320-.0340]
DIM. "D"	.550-.650 [.0217-.0256]	.025-.045 [.0010-.0018]	.008-.018 [.0003-.0007]	.686-.727 [.0270-.0286]

1 ROW 1 AND 2 HOLES ARE ONLY USED FOR HM-HXXXX2-8BX1 STYLE HEADER.



RECOMMENDED PCB MOUNTING HOLE PATTERN
(VIEWED FROM COMPONENT SIDE)

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
INTERCONNECT SOLUTIONS	ISD	CASTIGLIONE	MAR 28, 2012	MFG DATE		
DO NOT SCALE DRAWING	SCALE 3/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION						
MAX SURFACE ROUGHNESS						
MARKED ONLY						

A	39815	MAR 28, 2012	JNC	TS
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
CASTIGLIONE	MAR 28, 2012	MFG DATE		
CHKD		DATE		
APPR	T. SUNIGA	DATE		
DATE				

3M 3M Center St. Paul, MN 55144

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TITLE
HM PRESS-FIT HEADER, 8-ROW, HM SERIES

CAGE NUMBER
D 78-5100-2517-0

REV.
A

MODEL
SHT 4 OF 4