

MM70 Series Replacement Release

JAE is now releasing the replacement for the MM70 Series. One new variation of the MM70 Series connectors will be made available as an alternative for parts which were recently discontinued or will be discontinued in 2021. Although the MM70 was originally developed for the MXM 3.0 graphics card standard, it has been repurposed for various computing applications where a high pin count connector is required to interface between a single board computer card and the mother board. Below is a description of the new item as well as differences with the older MM70 part numbers. We recommend that all existing customers using the older MM70 parts transition to the new part as soon as possible.

1. New Part Number:

MM70-314B1-2-R300

2. Old Part Numbers Being Discontinued in 2020 and 2021:

a. PCB Footprint, Form Factor, and Card Interface Compatible

MM70-314-310B1-1-R300

MM70-314-310B1-2-R300

b. Card Interface Compatible Only

MM70-314-310B2-1-R500

MM70-314-310B2-2-R500

MM70-314B2-1-R500

3. Part Number Comparison

Part Number	Number of Pins Loaded	Gold Plating Thickness	Connector Height	PCB Footprint	Card Interface
MM70-314B1-2-R300	314	0.3µm minimum	6.7mm	Type B1	MXM 3.0
MM70-314-310B1-1-R300	310 out of 314	0.1µm minimum	6.7mm	Type B1	MXM 3.0
MM70-314-310B1-2-R300	310 out of 314	0.3µm minimum	6.7mm	Type B1	MXM 3.0
MM70-314-310B2-1-R500	310 out of 314	0.1µm minimum	4.3mm	Type B2	MXM 3.0
MM70-314-310B2-2-R500	310 out of 314	0.3µm minimum	4.3mm	Type B2	MXM 3.0
MM70-314B2-1-R500	314	0.1µm minimum	4.3mm	Type B2	MXM 3.0

PCB Footprint

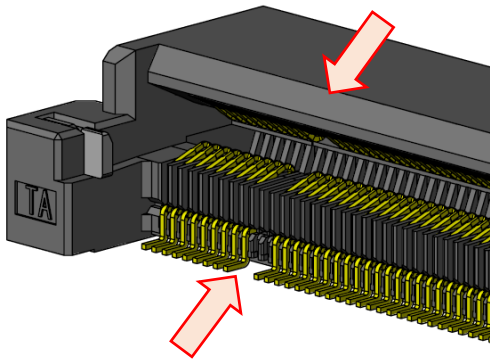
The B1 and B2 type footprint are similar but will require small repositioning of surface mount pads and the 2 drilled holes. Pin assignment is the same for both types so similar signal routing should be possible.

Terminal Coplanarity

The tolerance for coplanarity of the surface mount terminals shown in the drawing will change to 0.3mm max for the new connector.

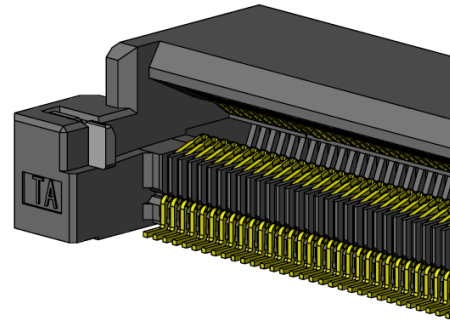
310 Pin vs. 314 Pin

In the original MXM 3.0 use cases, there were four contacts in the connector which were not necessary for normal operation, so those contacts were not loaded into the connectors with only 310 pins. The new connector has all of the contacts loaded so that it will work with both MXM 3.0 and new single board computer applications that require all 314 pins.



310 Pin

4 positions are not populated



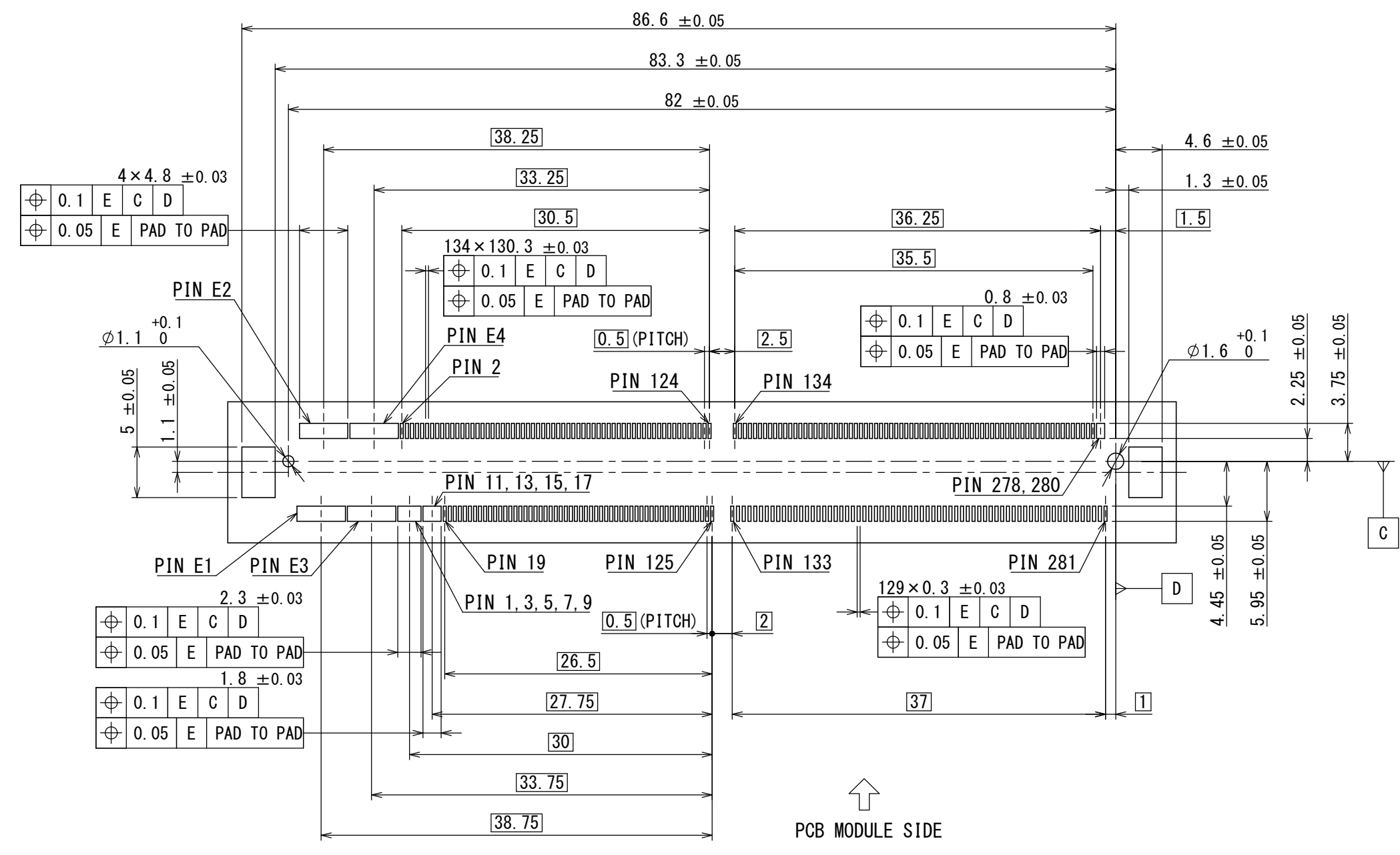
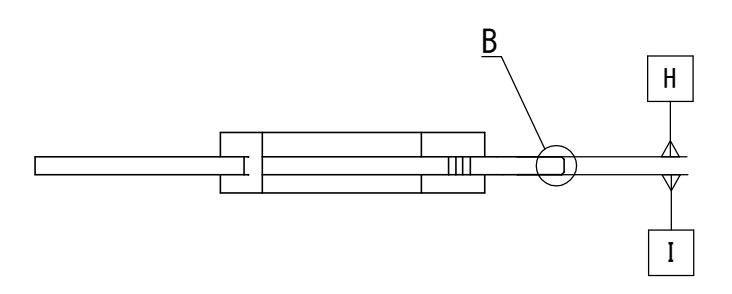
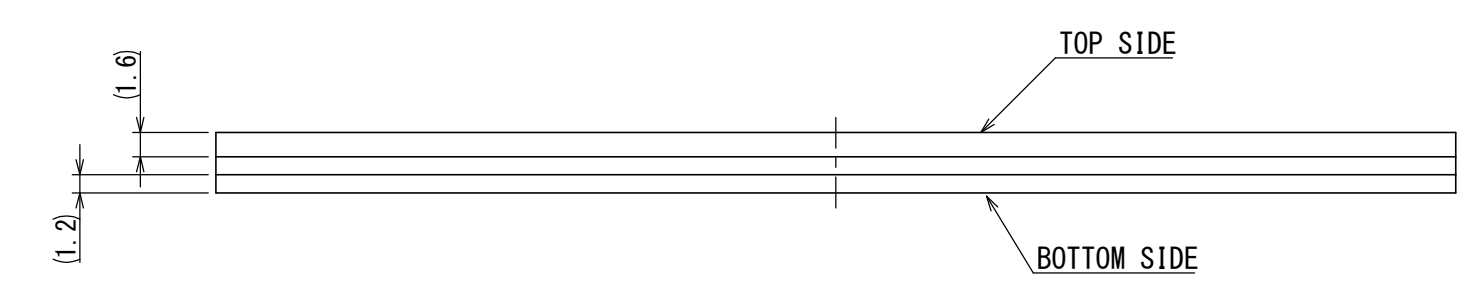
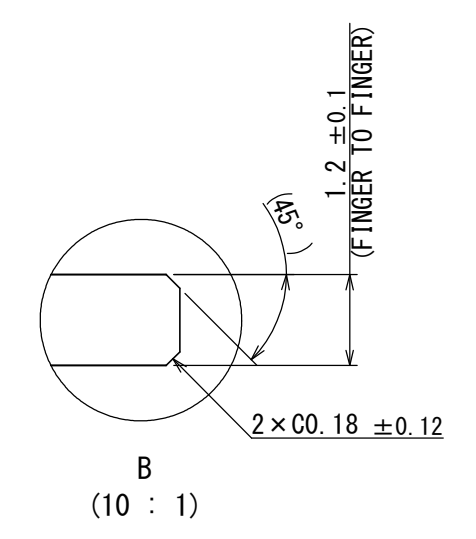
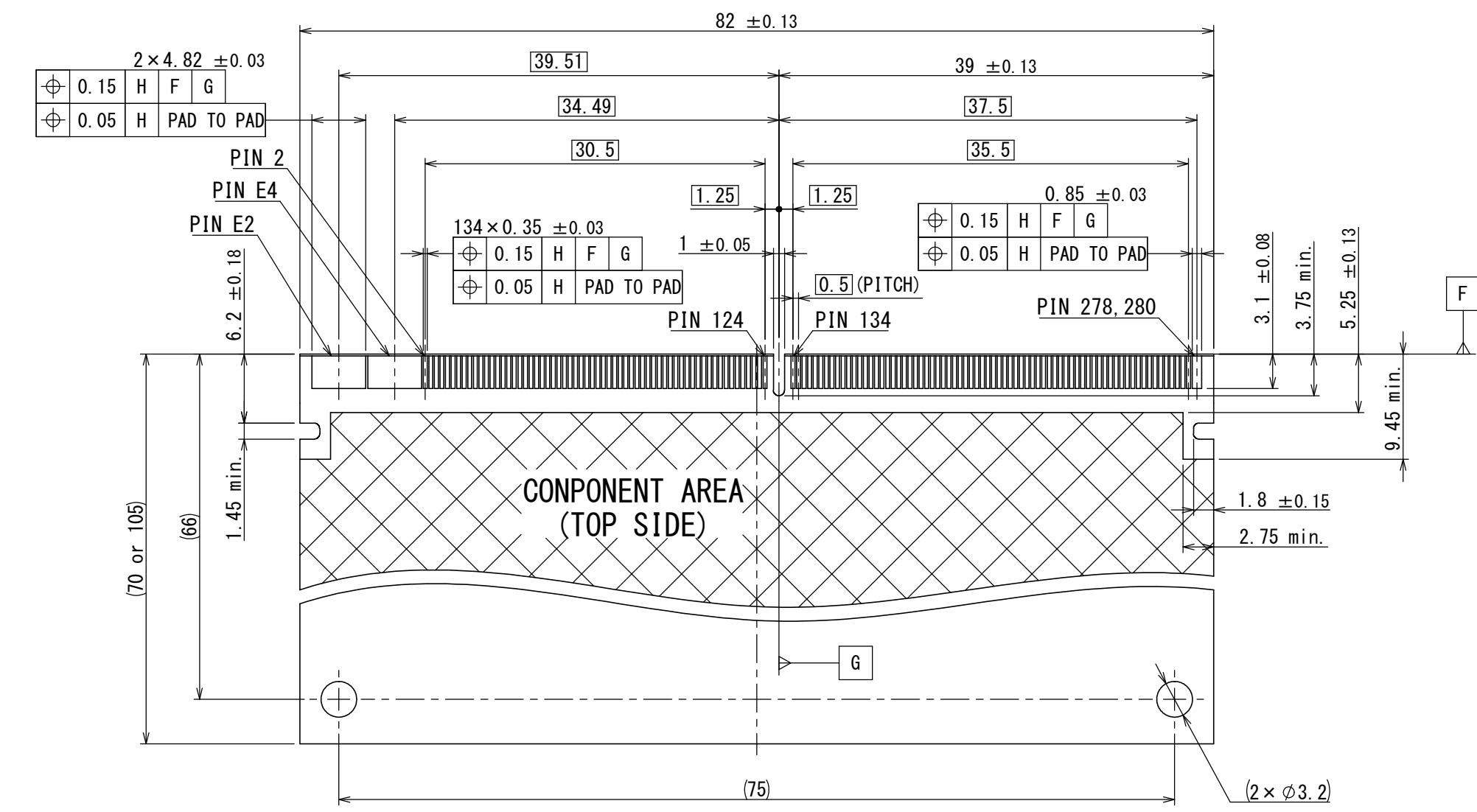
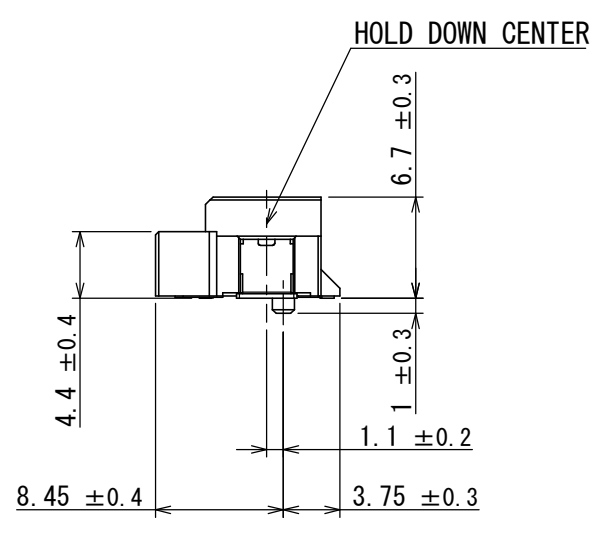
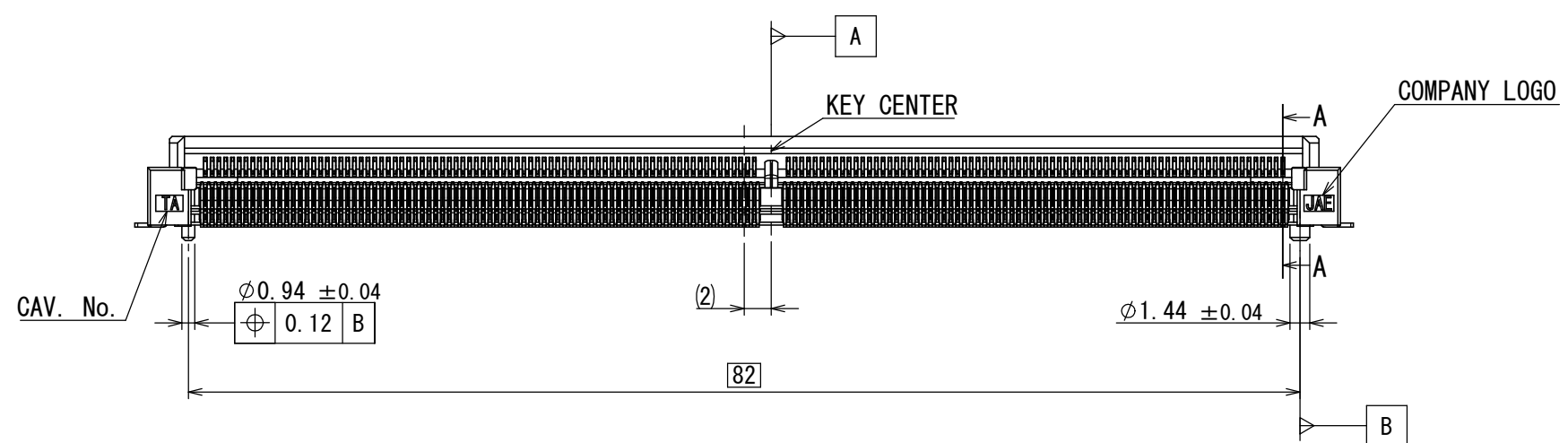
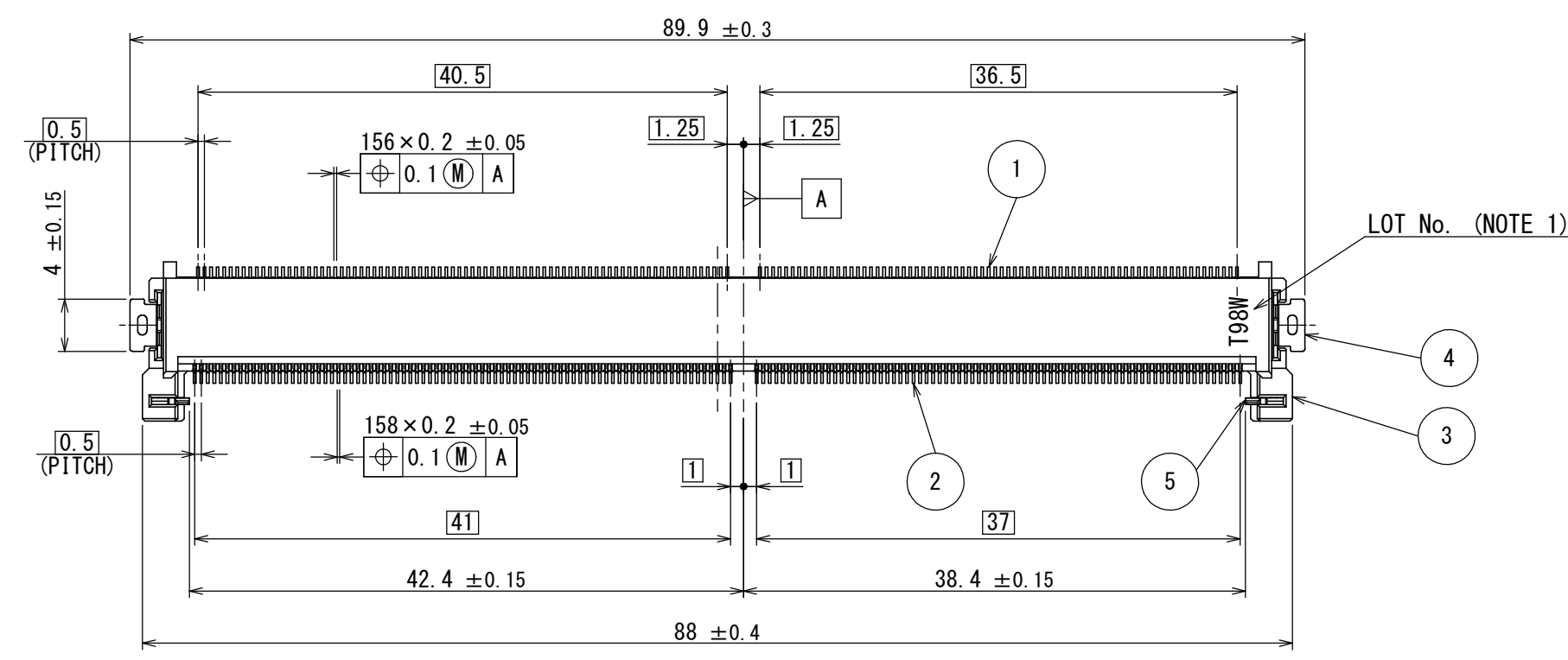
314 Pin

All positions are populated

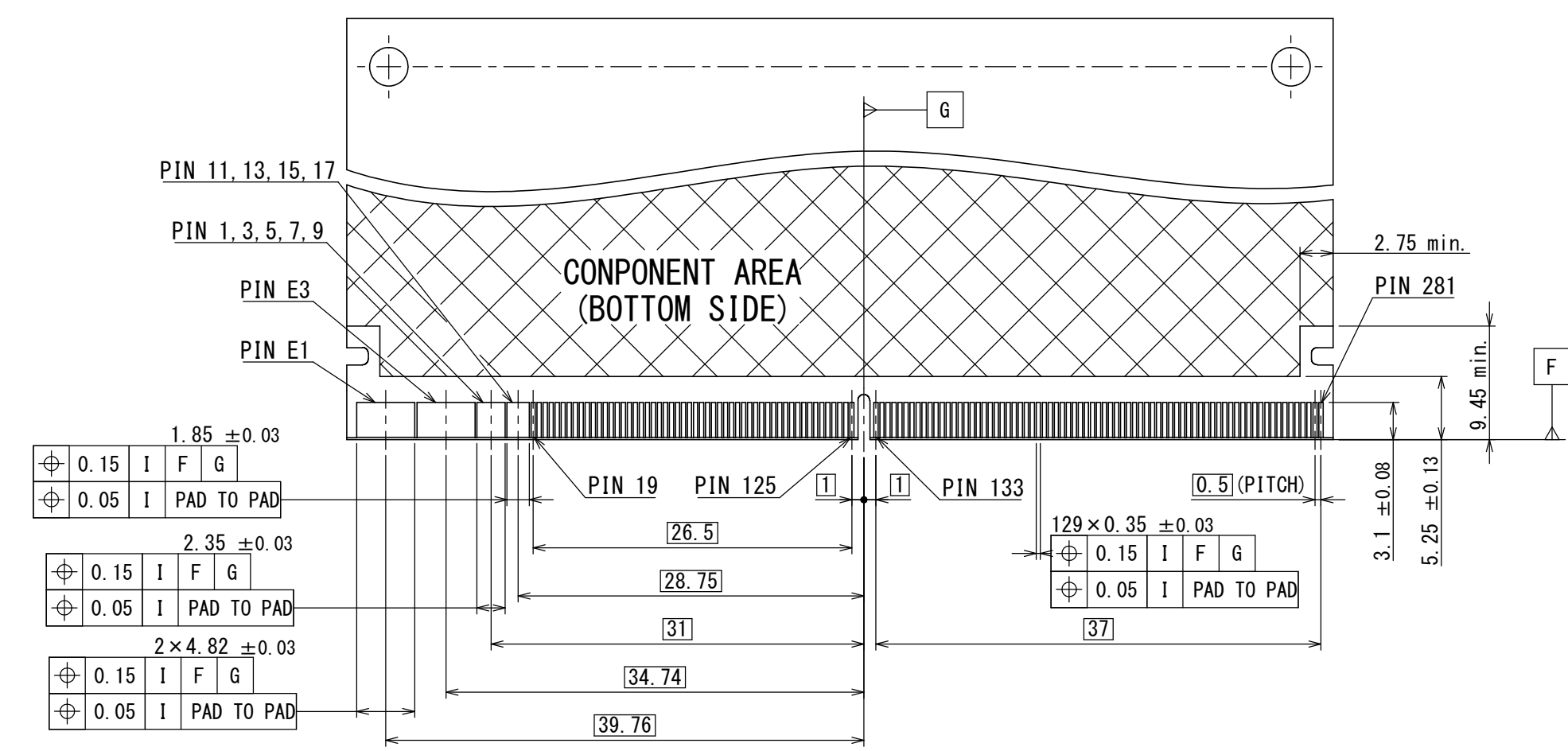
If you have any questions regarding this matter, please contact your JAE account manager.

Thank you for your cooperation.





APPLICABLE P.C.B. DIMENSION (REF.)
適合基板寸法 (参考)



APPLICABLE P.C.B. MODULE DIMENSION (REF.)
適合モジュール基板寸法 (参考)

MMX3.0 (Rev.1.0)

DESIGNATION
命名法

MM70-314B1-2

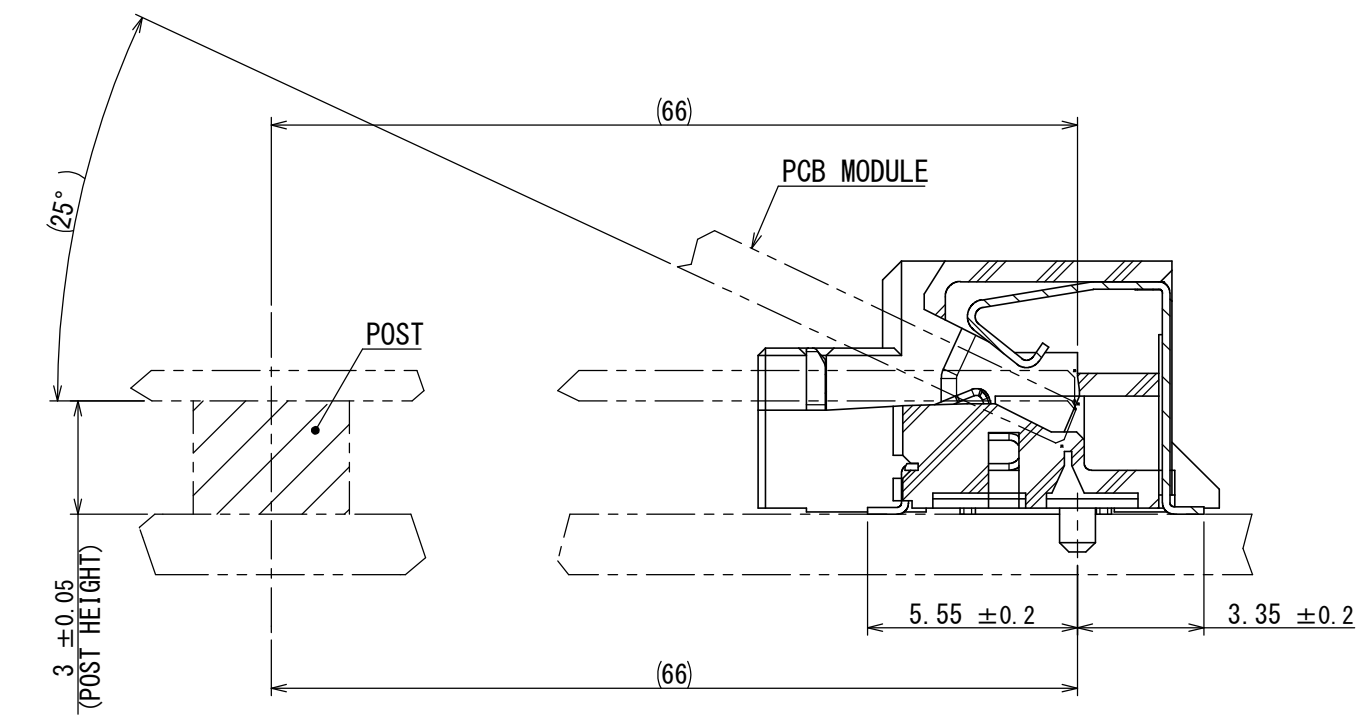
SERIES PREFIX
シリーズ名

NUMBER OF CONTACTS
基芯数

CONTACT FINISH
接点仕上げ
2: GOLD (0.3 μm MIN) OVER NICKEL

MODIFICATION CODE
モディファイコード

SOCKET TYPE
ソケットタイプ
B: ANGLED INSERTION TYPE



NOTE1. PRODUCTION LOT NUMBER AS INDICATED.
NOTE2. COPLANARITY OF SMT TERMINAL IS 0.3 MAX.

注1. 図示の面にロット番号を表示する。
注2. コンタクトのコプラナリティは0.3以下とする。

(EX.) I 9 9 2

LOT NUMBER OF CURRENT MONTH
当月の生産ロットを示す

MONTH (RESPECTIVELY, OCT.:0, NOV.:X, DEC.:Y)
月表示 (10月:0, 11月:X, 12月:Y)

YEAR (LAST DIGIT ONLY)
年表示 (西暦末尾)

PRODUCT CODE
製造コード

5 STOPPER	2 COPPER ALLOY	TIN OVER NICKEL	
4 HOLD DOWN	2 COPPER ALLOY	TIN OVER NICKEL	
3 INSULATOR	1 GLASS FILLED LCP		UL94 V-0 COLOR:BLACK
2 BOTTOM SIDE CONTACT	158 COPPER ALLOY	CONTACT AREA: REFER TO "DESIGNATION"	
1 TOP SIDE CONTACT	156 COPPER ALLOY	SOLDERING AREA: GOLD FLASH OVER NICKEL	

仕様書 (SPECIFICATION) JAACS-10543*	第1版 (ORIGINAL DATE) 02/SEP/2019	尺度 (SCALE) 2:1	シリーズ (SERIES) MM70	日本航空電子工業株式会社
製図 DR.	担当 CHK. Y. SATOU	名称 (TITLE) MM70-314B1-2	JAE JAPAN AVIATION ELECTRONICS INDUSTRY, LTD.	
一般公差 (GENERAL TOLERANCE) 寸法 (DIMENSION) × ± ×× ± ××× ±	角度 (ANGLES) ×° ± ××° ±	承認 APPD. Y. SAITOU	図面番号 (DRAWING NO.) SJ121699	
単位 (UNIT): mm			質量 (MASS)	版数 (VER.) 1