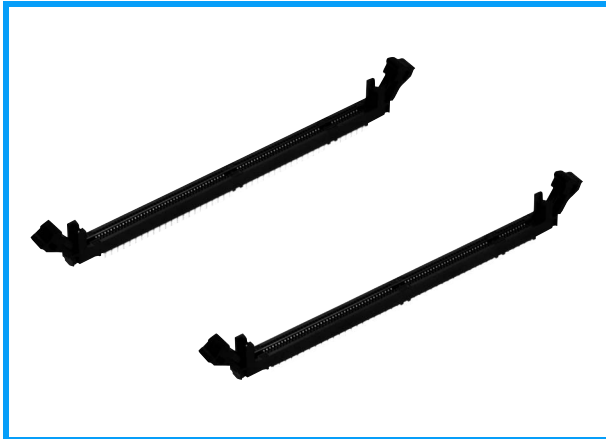


# DIMM Socket For Memory Expansion

## Conforming To JEDEC Standard DMM Series, 168 Contacts

Workstations, Computers, Disk arrays and Servers



### FEATURE

- Applicable to 168-position module per JEDEC standard MO-161
- Board locks which prevent the connector from lifting during reflow soldering
- Voltage keying design for both 5V and 3.3V modules
- Available with locking ejector on either side or both sides of connector
- Insulator molded from surface mount compatible plastic
- Accepts DRAM, SDRAM and non-standard DRAM module
- Straight plug in design minimizes bending of module
- Low insertion force

### SPECIFICATION

|                                 |                               |
|---------------------------------|-------------------------------|
| Voltage rating                  | 250V AC (rms)                 |
| Current rating                  | 0.5A/contact                  |
| Dielectric withstanding voltage | 500V AC (rms) for 1 minute    |
| Insulation resistance           | 500M $\Omega$ min. at 500V DC |
| Contact resistance              | 40m $\Omega$ max.             |

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DMM(168)

### MATERIAL/FINISH

|                |   |
|----------------|---|
| Contact/Finish | Copper alloy/Gold over Nickel plating (mating), Tin-lead plating (tail) |
| Insulator      | Polyamide resin (UL94V-O)/Black   |
| Ejector        | Stainless steel   |
| Board lock     | Copper alloy/Solder plating   |
| Lock           | Polyamide resin (UL94V-O)/Black   |

| DRAM Type          | Voltage            | P/N                |
|--------------------|--------------------|--------------------|
| Sync. DRAM         | 3.3V               | DMM-168FLDA1-3A113 |
|                    |                    | DMM-168FLDA1-3A133 |
|                    |                    | DMM-168FLDA2-3A113 |
|                    |                    | DMM-168FLDA2-3A133 |
|                    |                    | DMM-168FLDA2-3A134 |
|                    |                    | DMM-168FLDA2-3A13N |
|                    |                    | DMM-168FLDA2-3A135 |
|                    |                    | DMM-168FLDA2-3B133 |
|                    |                    | DMM-168FLDA2-3B137 |
|                    |                    | DMM-168FLDA2-3B13N |
|                    | DMM-168FLDA1-2A213 |                    |
|                    | DMM-168FLDA2-2A213 |                    |
|                    | DMM-168FLDA3-2A213 |                    |
|                    | DMM-168FLDA4-2A213 |                    |
|                    | DMM-168FLHB1-3A114 |                    |
|                    | DMM-168FLHB1-3A134 |                    |
|                    | DMM-168FLHB2-3A114 |                    |
|                    | DMM-168FLHB2-3A133 |                    |
|                    | DMM-168FLHB2-3A134 |                    |
|                    | Standard DRAM      | 3.3V               |
| DMM-168FLEA1-3A133 |                    |                    |
| DMM-168FLEA1-3A13N |                    |                    |
| DMM-168FLEA1-3A163 |                    |                    |
| DMM-168FLEA2-3A113 |                    |                    |
| DMM-168FLEA2-3A117 |                    |                    |
| DMM-168FLEA2-3A133 |                    |                    |
| DMM-168FLEA2-3A134 |                    |                    |
| DMM-168FLEA2-3A137 |                    |                    |
| DMM-168FLEA2-3A163 |                    |                    |
| DMM-168FLEA3-3A117 |                    |                    |
| DMM-168FLEA3-3A137 |                    |                    |
| DMM-168FLFB1-3A116 |                    |                    |
| DMM-168FLFB1-3A136 |                    |                    |
| DMM-168FLFB2-2B214 |                    |                    |
| DMM-168FLFB2-3A111 |                    |                    |
| DMM-168FLFB2-3A116 |                    |                    |
| DMM-168FLFB2-3A132 |                    |                    |
| DMM-168FLFB2-3A133 |                    |                    |
| DMM-168FLFB2-3A136 |                    |                    |
| Non-Standard DRAM  | 3.3V               | DMM-168FLAA1-1A233 |
|                    |                    | DMM-168FLAA1-3A113 |
|                    |                    | DMM-168FLAA1-3A133 |
|                    |                    | DMM-168FLAA2-2A213 |
|                    |                    | DMM-168FLAA2-2A233 |
|                    |                    | DMM-168FLAA2-2A236 |
|                    |                    | DMM-168FLAA2-2B212 |
|                    |                    | DMM-168FLAA2-2B232 |
|                    |                    | DMM-168FLAA2-2B233 |
|                    |                    | DMM-168FLAA2-2B262 |
|                    |                    | DMM-168FLAA2-2B263 |
|                    |                    | DMM-168FLAA2-3A113 |
|                    |                    | DMM-168FLAA2-3A116 |
|                    |                    | DMM-168FLAA2-3A133 |
|                    |                    | DMM-168FLAA2-3A136 |
|                    |                    | DMM-168FLAA2-3A166 |
|                    |                    | DMM-168FLAA2-3A13N |
|                    |                    | DMM-168FLAA2-3B112 |
|                    |                    | DMM-168FLAA2-3B133 |
|                    |                    | DMM-168FLAA2-3B13N |
|                    | DMM-168FLAA2-3B162 |                    |
|                    | DMM-168FLAA2-3A137 |                    |
|                    | DMM-168FLAA2-3A163 |                    |
|                    | DMM-168FLAA2-3A134 |                    |
|                    | DMM-168FLAA3-1A233 |                    |
|                    | DMM-168FLAA3-1A234 |                    |
|                    | DMM-168FLAA3-3A113 |                    |
|                    | DMM-168FLAA3-3A133 |                    |
|                    | DMM-168FLAA3-3A136 |                    |
|                    | DMM-168FLAA3-3A13N |                    |
|                    | DMM-168FLAA3-1B212 |                    |
|                    | DMM-168FLAA4-3A113 |                    |
|                    | DMM-168FLAA4-3A133 |                    |
|                    | 5.0V               | DMM-168FLGB1-3A112 |
|                    |                    | DMM-168FLGB1-3A132 |
|                    |                    | DMM-168FLGB2-3A112 |
|                    |                    | DMM-168FLGB2-3A132 |

# DMM Series (168 Contacts)

Unit : mm

■ Sync. DRAM Operation Voltage 3.3V

## DMM-168FLDA2-3A23N

### Housing/Lock color

- 1 : Ivory/Ivory
- 2 : Black/Black
- 3 : Black/Ivory
- 4 : Ivory/Ivory

### Tail Pitch

- 2 : 1.27mm
- 3 : 1.905mm

### Tail Pitch Arrangement

- A : See page 3
- B : See page 3

### Board lock and hole size

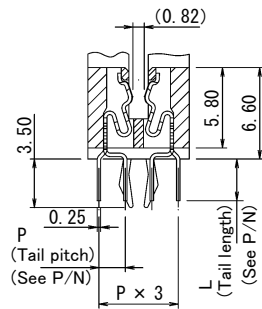
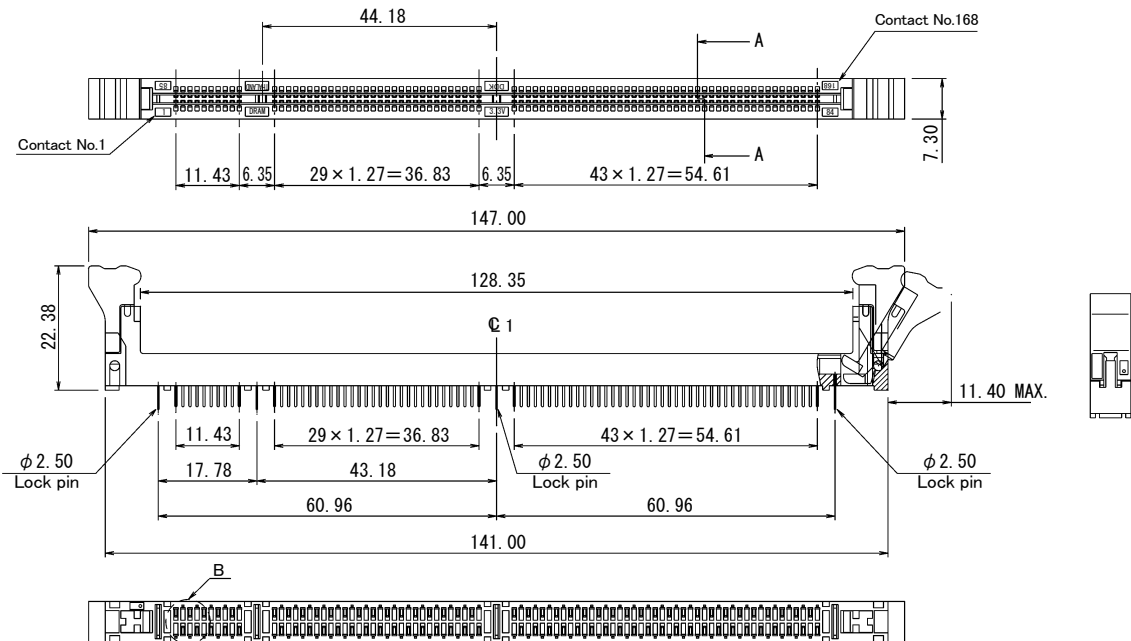
- N : without Board lock
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 5 : with 1 Board locks,  $\phi$  2.03 holes
- 7 : with 3 Board locks,  $\phi$  2.03 holes

### Contact plating

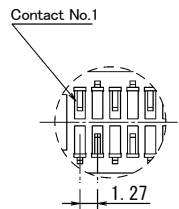
- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead

### Tail Length

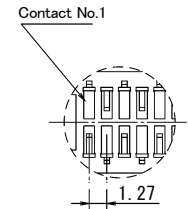
- 1 : 3.0mm
- 2 : 3.2mm



SEC.A-A



DETAIL B-1  
DMM-168FL □□□ - □ A □□□



DETAIL B-2  
DMM-168FL □□□ - □ B □□□

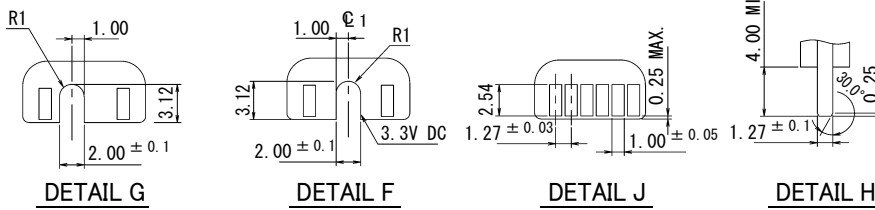
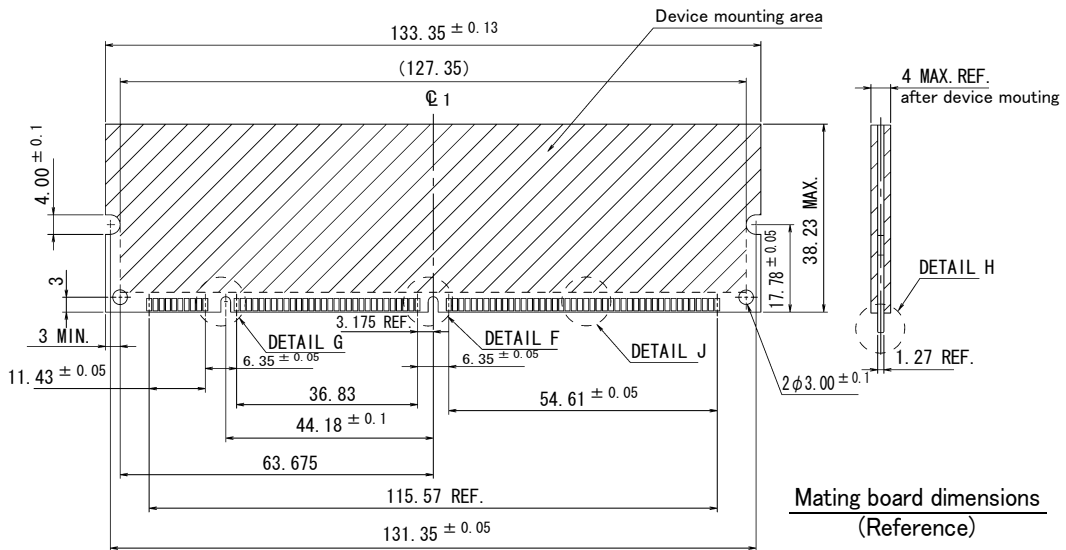
H  
DMM(168)

# DMM Series (168 Contacts)

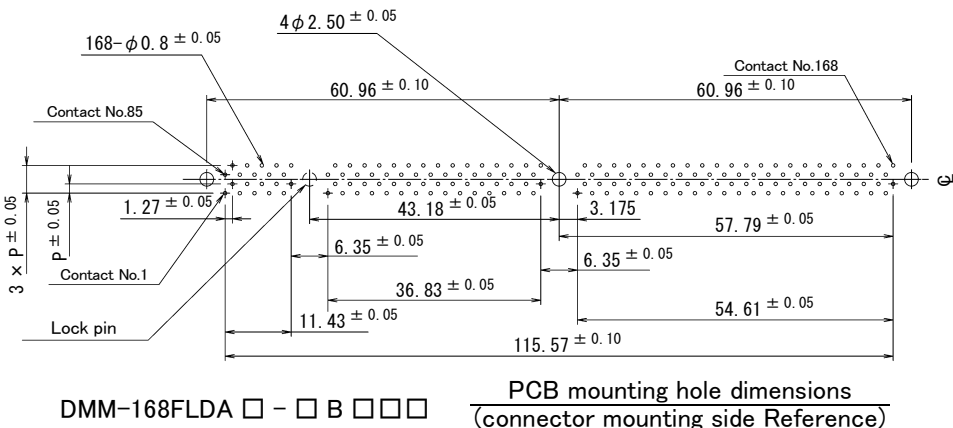
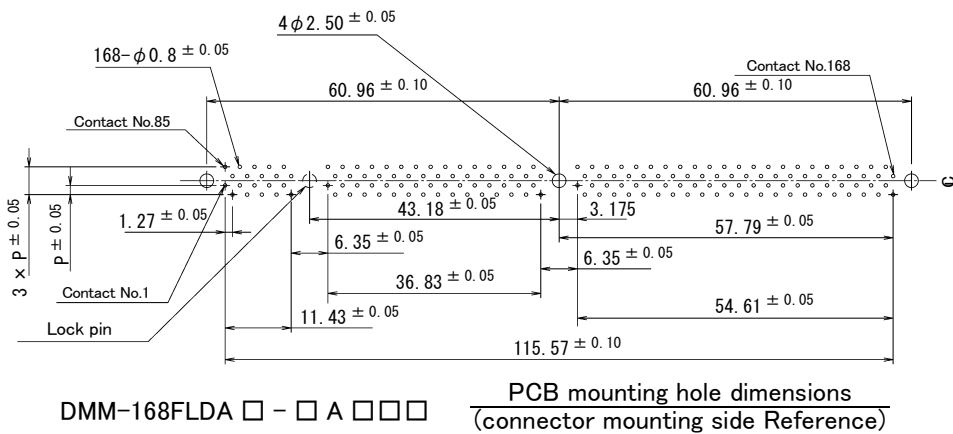
Unit : mm

## Sync. DRAM Operation Voltage 3.3V

### Mating board dimensions



### PCB mounting hole dimensions



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DMM(168)

# DMM Series (168 Contacts)

Unit : mm

■ Sync. DRAM Operation Voltage 5.0V

## DMM-168FLHB<sup>2</sup>-3A1<sup>34</sup>

### Housing/Lock color

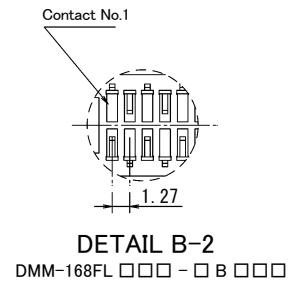
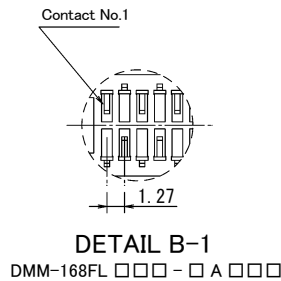
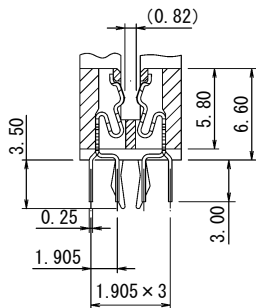
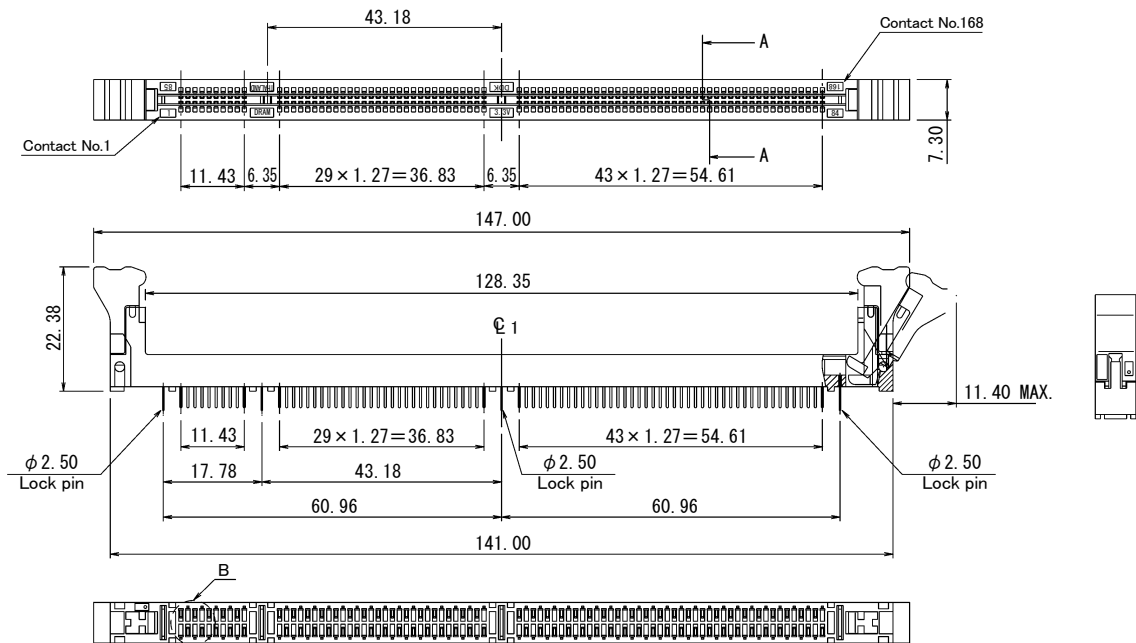
- 1 : Ivory/Ivory
- 2 : Black/Black

### Board lock and hole size

- N : without Board lock
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes

### Contact plating

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead



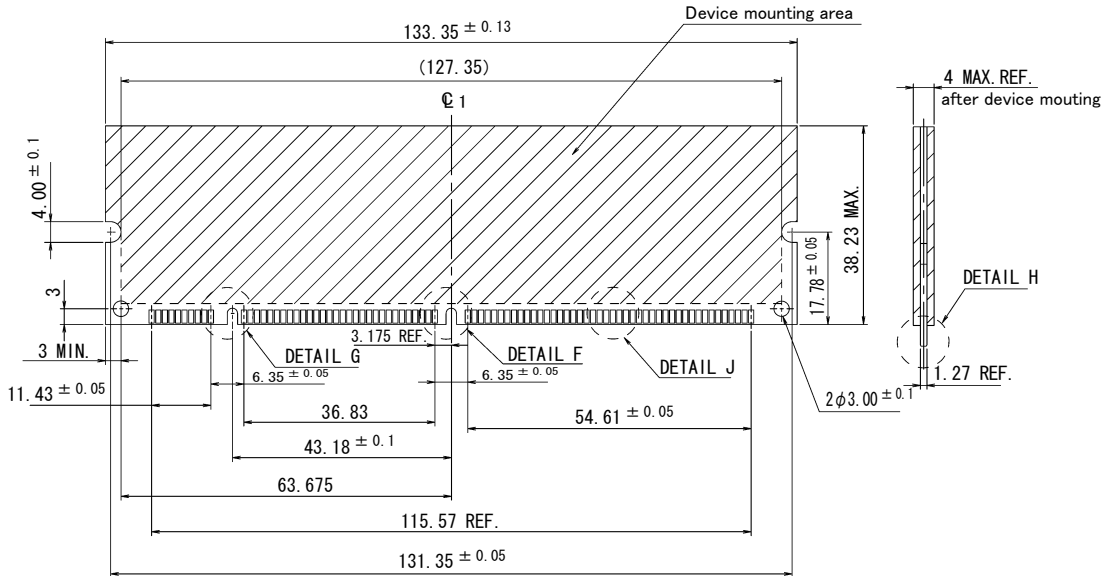
H  
DMM(168)

# DMM Series (168 Contacts)

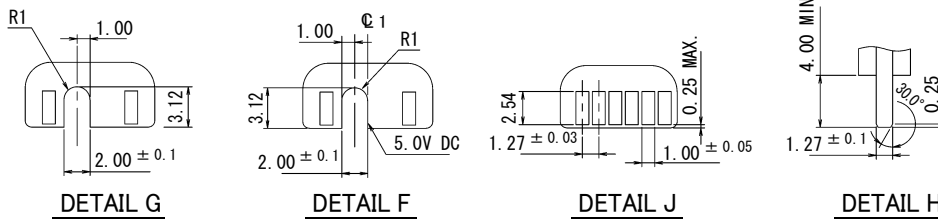
Unit : mm

## Sync. DRAM Operation Voltage 5.0V

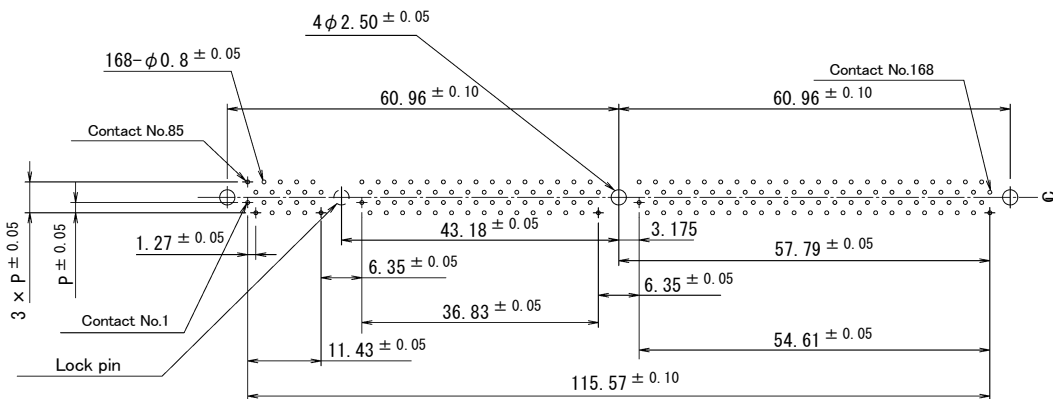
### Recommended mating board dimensions



Recommended mating board dimensions  
(Reference)



### Recommended PCB mounting hole dimensions



DMM-168FLHB □ - □ A □ □ □  
Recommended PCB mounting hole dimensions  
(connector mounting side Reference)

H

DMM(168)

# DMM Series (168 Contacts)

Unit : mm

Standard DRAM Operation Voltage 3.3V

## DMM-168FLEA3-3A13N

### Housing/Lock color

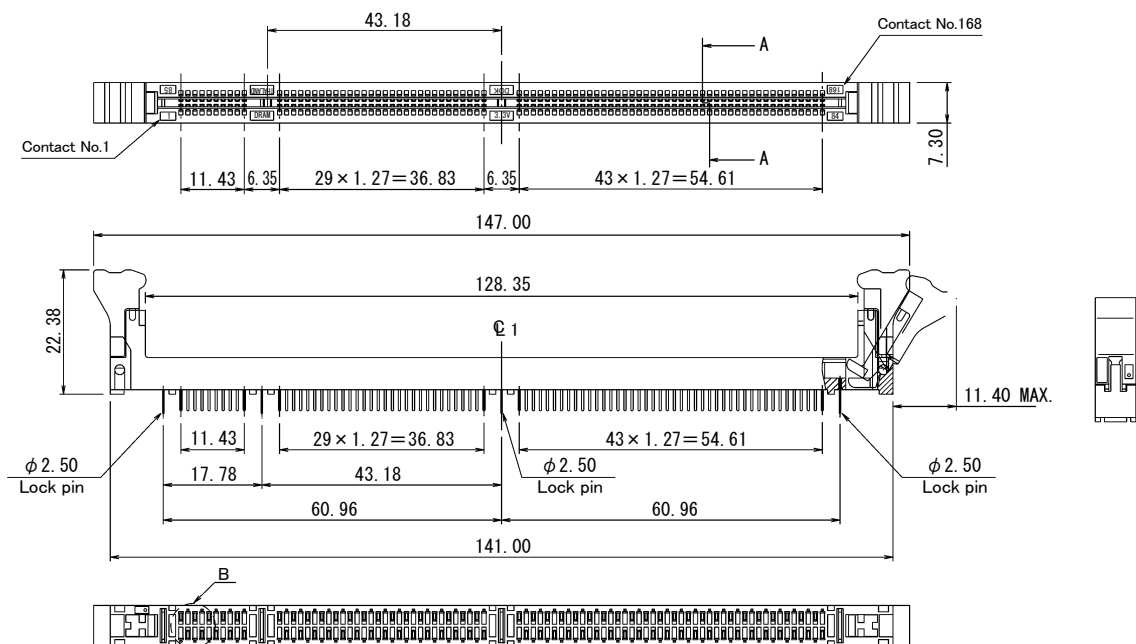
- 1 : Ivory/Ivory
- 2 : Black/Black
- 3 : Black/Ivory

### Board lock and hole size

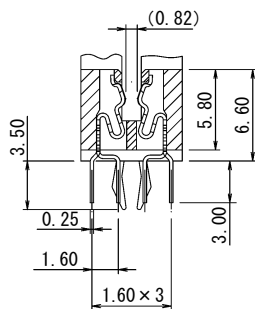
- N : without Board lock
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 7 : with 3 Board locks,  $\phi$  2.03 holes

### Contact plating

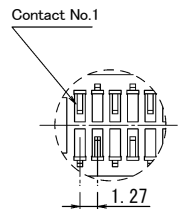
- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead
- 6 : Mating area...0.76  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead



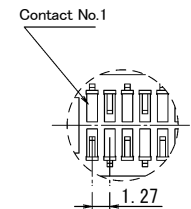
H  
DMM(168)



SEC.A-A



DETAIL B-1  
DMM-168FL □□□ - □ A □□□



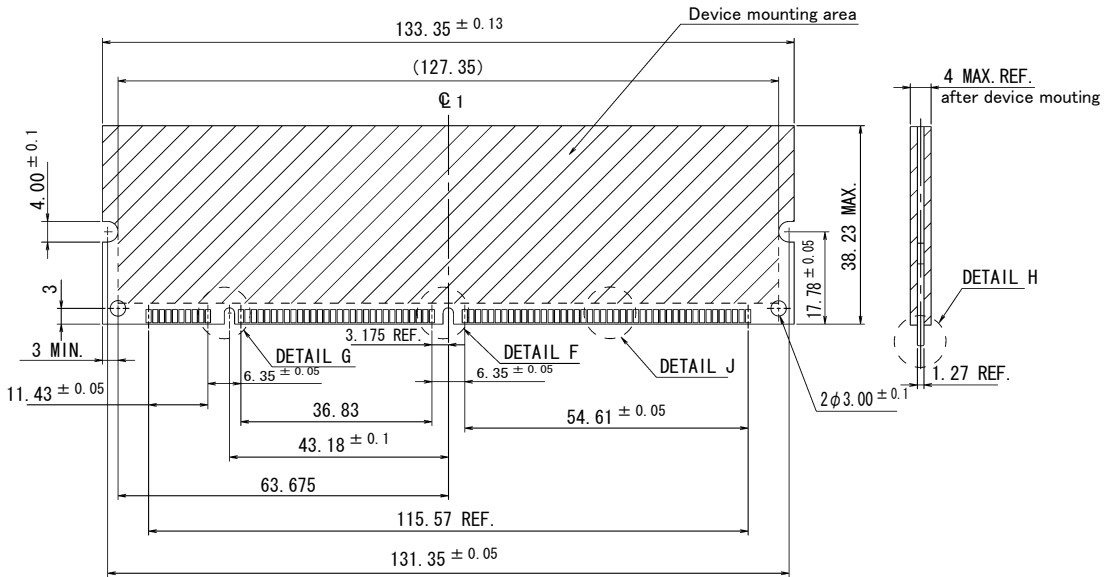
DETAIL B-2  
DMM-168FL □□□ - □ B □□□

# DMM Series (168 Contacts)

Unit : mm

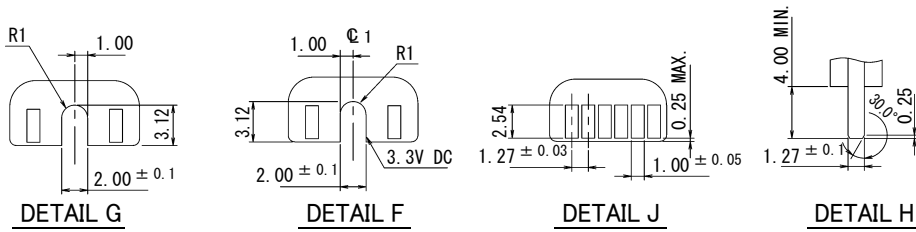
## Standard DRAM Operation Voltage 3.3V

### Recommended mating board dimensions

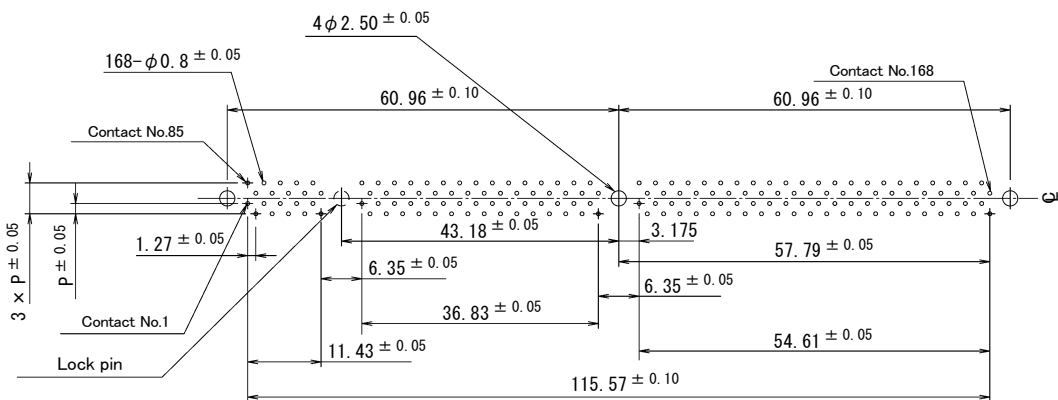


Recommended mating board dimensions  
(Reference)

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DMM(168)



### Recommended PCB mounting hole dimensions



DMM-168FLEA □ - □ A □ □ □  
Recommended PCB mounting hole dimensions  
(connector mounting side Reference)

# DMM Series (168 Contacts)

Unit : mm

Standard DRAM Operation Voltage 5.0V

## DMM-168FLFB2-3A136

### Housing/Lock color

- 1 : Ivory/Ivory
- 2 : Black/Black

### Tail Pitch

- 2 : 1.27mm
- 3 : 1.905mm

### Tail Pitch Arrangement

- A : See page 9
- B : See page 9

### Board lock and hole size

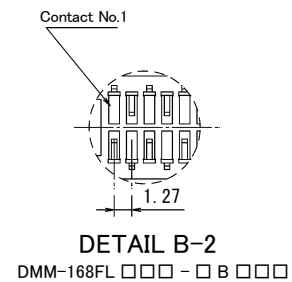
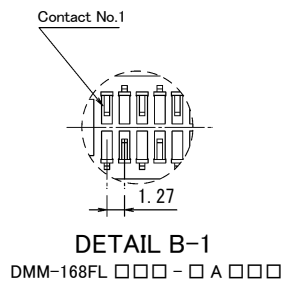
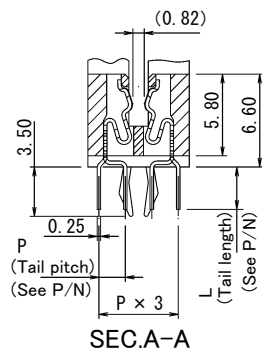
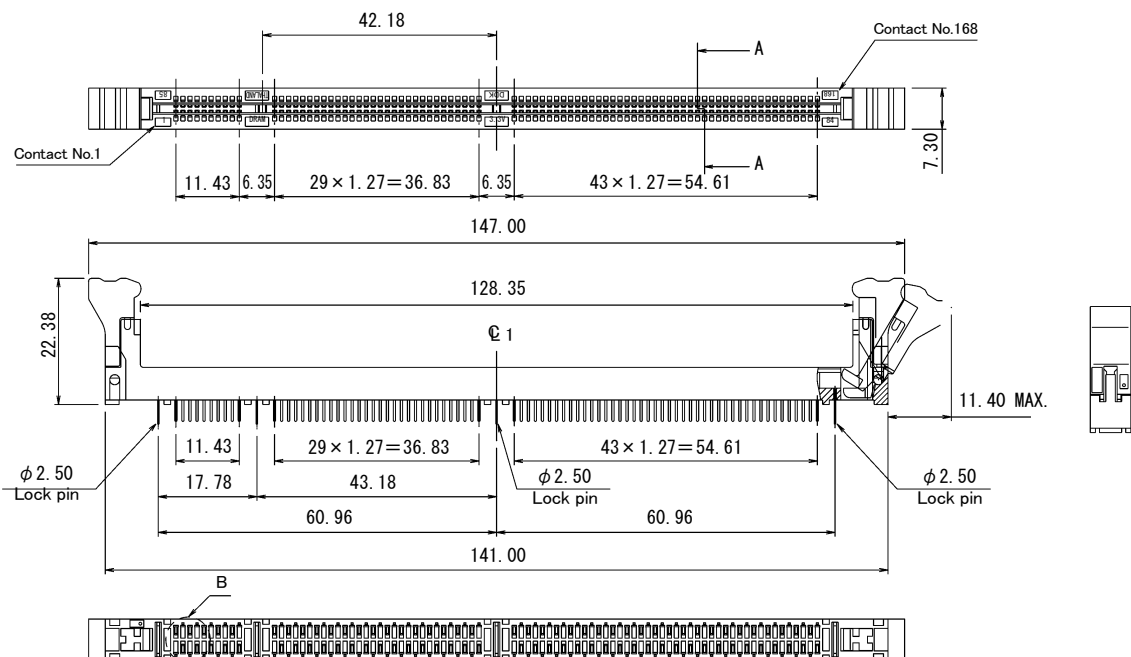
- 1 : with 1 Board locks,  $\phi$  2.50 holes
- 2 : with 2 Board locks,  $\phi$  2.50 holes
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 6 : with 2 Board locks,  $\phi$  2.03 holes

### Contact plating

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead

### Tail Length

- 1 : 3.0mm
- 2 : 3.2mm



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DMM(168)

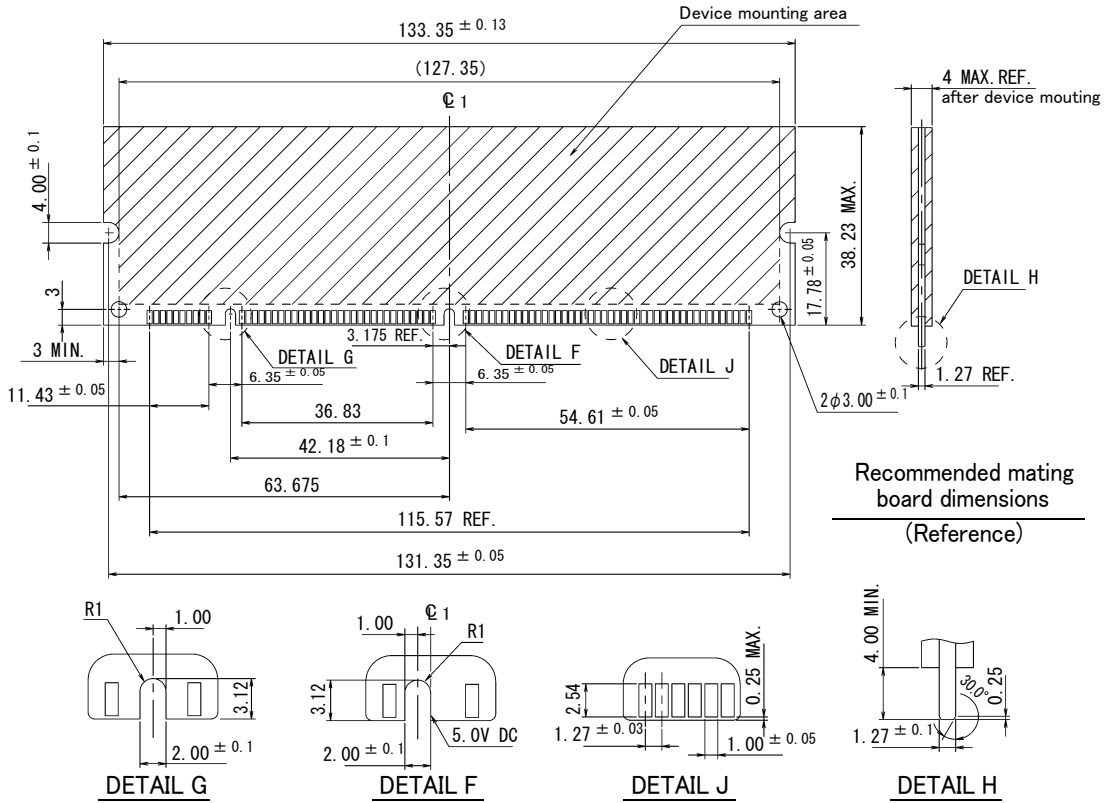


# DMM Series (168 Contacts)

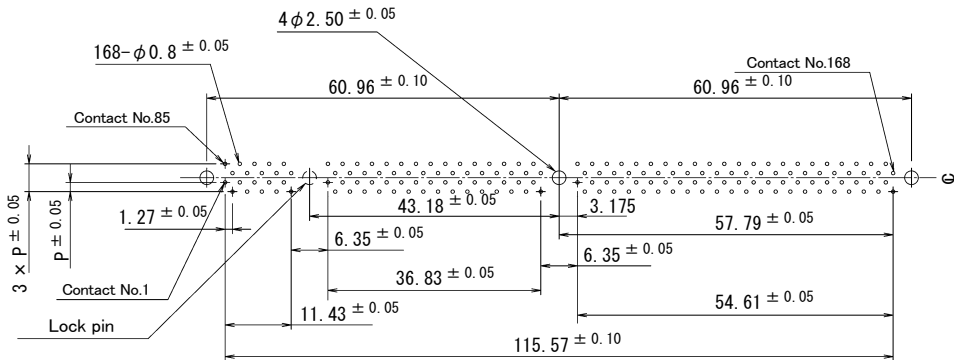
Unit : mm

## Standard DRAM Operation Voltage 5.0V

### Recommended mating board dimensions

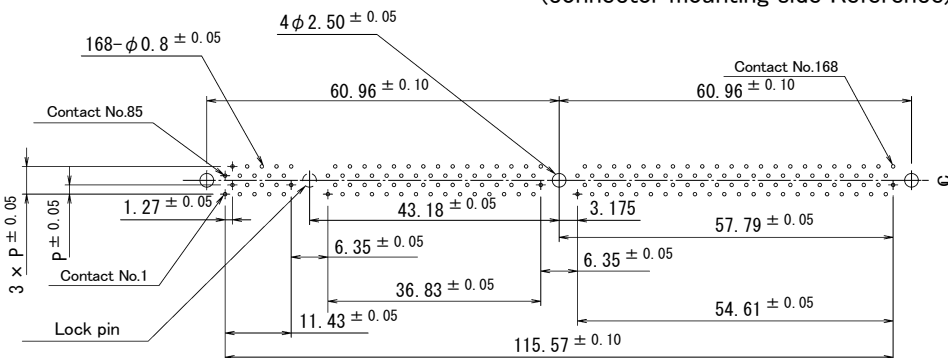


### Recommended PCB mounting hole dimensions



DMM-168FLFB □ - □ A □ □ □

**Recommended PCB mounting hole dimensions (connector mounting side Reference)**



DMM-168FLFB □ - □ B □ □ □

**Recommended PCB mounting hole dimensions (connector mounting side Reference)**

# DMM Series (168 Contacts)

Unit : mm

## Non-Standard DRAM Operation Voltage 3.3V

### DMM-168FLAA2-3B216

#### Housing/Lock color

- 1 : Ivory/Ivory
- 2 : Black/Black
- 3 : Black/Ivory
- 4 : Ivory/Ivory

#### Tail Pitch

- 1 : 1.60mm
- 2 : 1.27mm
- 3 : 1.905mm

#### Tail Pitch Arrangement

- A : See page 11
- B : See page 11

#### Board lock and hole size

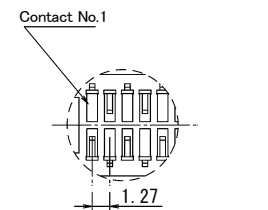
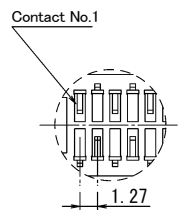
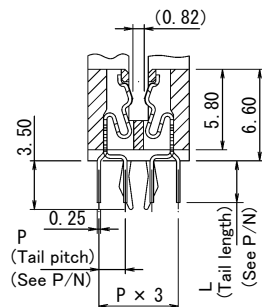
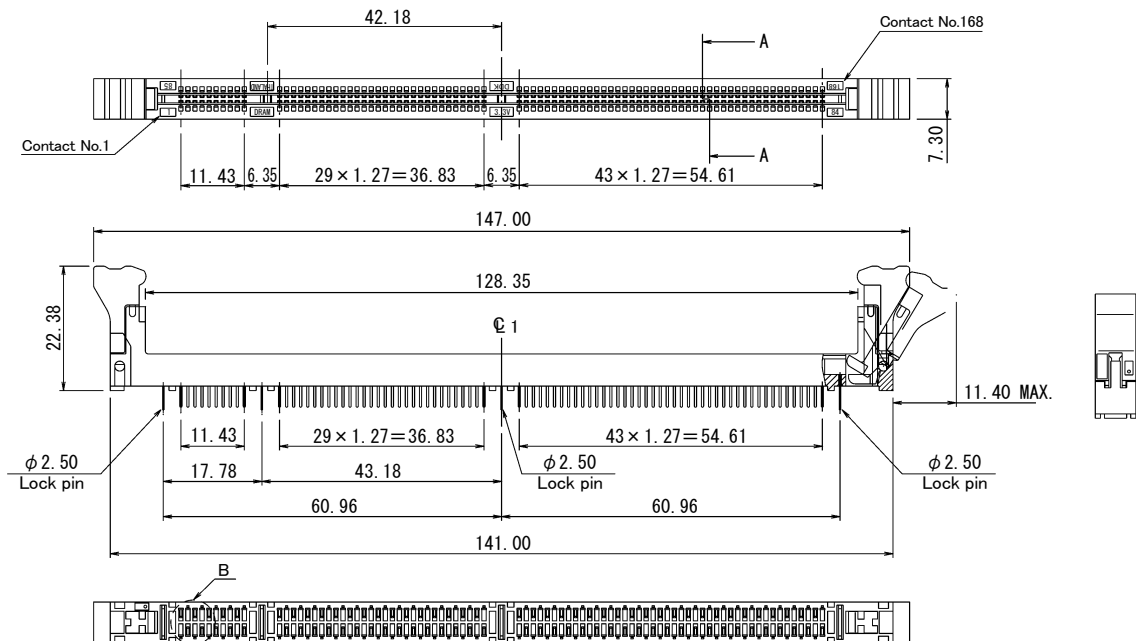
- N : without Board lock
- 2 : with 2 Board locks,  $\phi$  2.50 holes
- 3 : with 3 Board locks,  $\phi$  2.50 holes
- 4 : with 4 Board locks,  $\phi$  2.50 holes
- 6 : with 2 Board locks,  $\phi$  2.03 holes
- 7 : with 3 Board locks,  $\phi$  2.03 holes

#### Contact plating

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead
- 6 : Mating area...0.76  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead

#### Tail Length

- 1 : 3.0mm
- 2 : 3.2mm



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DMM(168)



# DMM Series (168 Contacts)

Unit : mm

■ Non-Standard DRAM Operation Voltage 5.0V

## DMM-168FLGB 1-3A 132

**Housing/Lock color**

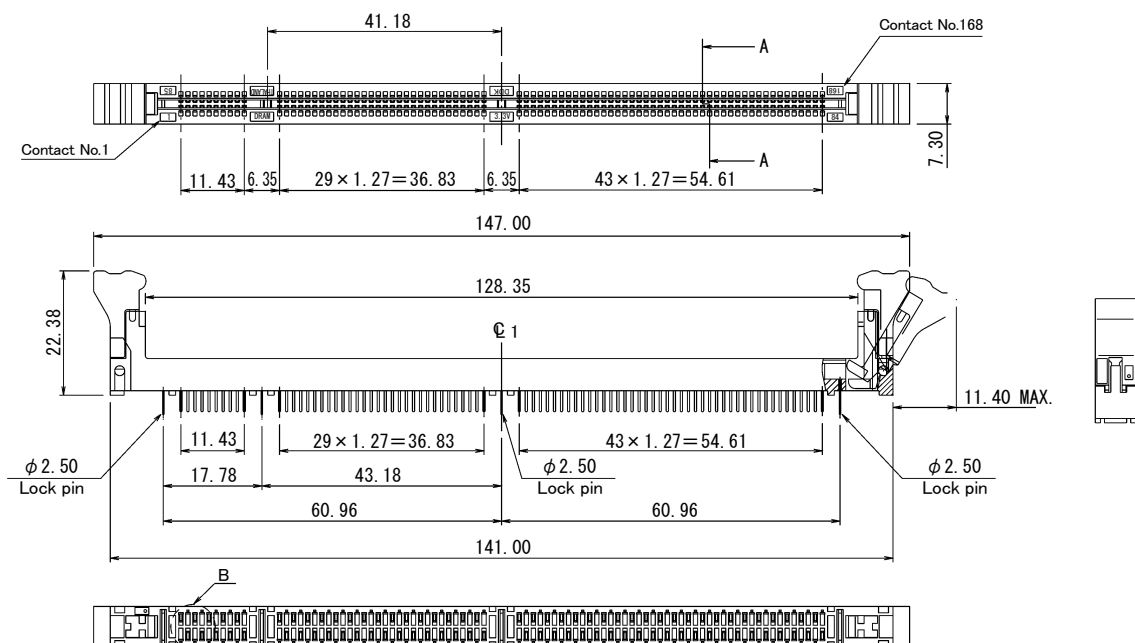
- 1 : Ivory/Ivory
- 2 : Black/Black

**Board lock and hole size**

- N : without Board lock
- 2 : with 2 Board locks,  $\phi$  2.50 holes
- 3 : with 3 Board locks,  $\phi$  2.50 holes

**Contact plating**

- 1 : Mating area...0.3  $\mu$  m Gold over Nickel  
Tail area...Tin-Lead
- 3 : (Standard)  
Mating area...Gold flash over Nickel  
Tail area...Tin-Lead



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DMM(168)

