



## Micro-D Printed Circuit Board Connectors Condensed Board Straight CBS .075 Inch Spacing



**Save Space On Your Circuit Board**—These Micro-D connectors feature .075 inch row spacing. The board footprint is reduced to match the size of the connector body.

**Designed for Flex Circuits**—CBS COTS connectors are available with jackscrews for flex circuit compatibility.

**Solder-Dipped**—Terminals are coated with SN63/Pb37 tin-lead solder for best solderability. Optional gold-plated terminals are available for RoHS compliance.

**High Performance**—These connectors meet the demanding requirements of MIL-DTL-83513. Suitable for Level 1 NASA reliability.

### HOW TO ORDER CBS CONDENSED BOARD STRAIGHT CONNECTORS

| Series                         | Shell Material and Plating Finish | Insulator Material                   | Number of Contacts                         | Contact Type | Termination Style           | Hardware Option                                               | PC Tail Length                                                | Gold-Plated Terminal Mod Code                                |                  |
|--------------------------------|-----------------------------------|--------------------------------------|--------------------------------------------|--------------|-----------------------------|---------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------|------------------|
| MWDM<br>Micro-D<br>Metal Shell | Aluminum Shell                    | L<br>LCP<br>(Liquid Crystal Polymer) | 9                                          | P            | CBS                         | NN –No Jackpost, No Threaded Insert                           | .080                                                          | These connectors are solder-dipped in 63/37 tin-lead solder. |                  |
|                                | 1 – Cadmium                       |                                      | 15                                         | Pin          | Condensed Board<br>Straight | PN –Extended Jackpost for .062" (1.6) PCB, No Threaded Insert | .110                                                          |                                                              |                  |
|                                | 2 – Nickel                        |                                      | 21                                         | S<br>Socket  |                             |                                                               | .140                                                          |                                                              |                  |
|                                | 4 – Black Anodize                 |                                      | 25                                         |              |                             |                                                               | .172                                                          |                                                              |                  |
|                                | 5 – Gold                          |                                      | 31                                         |              |                             |                                                               | .190                                                          |                                                              |                  |
|                                | 6 – Chem Film                     |                                      | 37                                         |              |                             |                                                               | RN –Extended Jackpost for .196" (5.0) PCB, No Threaded Insert |                                                              | .250             |
|                                | Stainless Steel Shell             | 3 – Passivated                       | 51                                         |              |                             |                                                               |                                                               |                                                              | Length in Inches |
|                                |                                   |                                      | 69                                         |              |                             |                                                               |                                                               |                                                              |                  |
|                                |                                   |                                      | 100                                        |              |                             |                                                               |                                                               |                                                              |                  |
|                                |                                   |                                      | NU –Threaded Insert Only, No Jackposts     |              | ± .015<br>(0.38)            |                                                               |                                                               |                                                              |                  |
|                                |                                   |                                      | PU –Short Jackpost and Threaded Insert     |              |                             |                                                               |                                                               |                                                              |                  |
|                                |                                   |                                      | Rear Panel Jackposts With Threaded Inserts |              |                             |                                                               |                                                               |                                                              |                  |
|                                |                                   |                                      | R6U – 0.125" (3.2) Panel                   |              |                             |                                                               |                                                               |                                                              |                  |
|                                |                                   |                                      | R5U – 0.094" (2.4) Panel                   |              |                             |                                                               |                                                               |                                                              |                  |
| R4U – 0.062" (1.6) Panel       |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| R3U – 0.047" (1.2) Panel       |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| R2U – 0.031" (0.8) Panel       |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| Jackscrew Options              |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| M – Hex Head Jackscrews        |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| S – Slot Head Jackscrews       |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| Sample Part Number             |                                   |                                      |                                            |              |                             |                                                               |                                                               |                                                              |                  |
| MWDM                           | 1                                 | L –                                  | 31                                         | P            | CBS                         | NN                                                            | – .110                                                        |                                                              |                  |

**HARDWARE OPTIONS**  
See Pages C-16 and C-17

# Micro-D Printed Circuit Board Connectors Condensed Board Straight CBS .075 Inch Spacing



Micro-D  
PCB

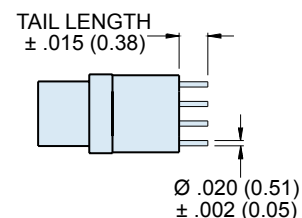
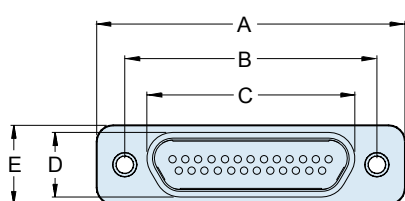
## PERFORMANCE SPECIFICATIONS

|                           |                               |
|---------------------------|-------------------------------|
| Current Rating            | 3 AMP                         |
| DWV                       | 600 VAC Sea level             |
| Insulation Resistance     | 5000 Megohms Minimum          |
| Contact Resistance        | 8 Milliohms Maximum           |
| Low Level Contact Resist. | 32 Milliohms Maximum          |
| Magnetic Permeability     | 2 $\mu$ Maximum               |
| Operating Temperature     | -55° C. to +150° C.           |
| Shock, Vibration          | 50 g., 20g.                   |
| Mating Force              | (10 Ounces) X (# of Contacts) |

## MATERIALS AND FINISHES

|                  |                                                                                                       |
|------------------|-------------------------------------------------------------------------------------------------------|
| Connector Shell  | Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options |
| Insulator, Tray  | Liquid Crystal Polymer (LCP)                                                                          |
| Interfacial Seal | Fluorosilicone Rubber, Blue                                                                           |
| Pin Contact      | Copper Alloy, Gold over Nickel Plating                                                                |
| Socket Contact   | Copper Alloy, Gold Over Nickel Plating                                                                |
| PCB Terminals    | Gold Plated Copper Alloy, Solder Dipped                                                               |
| Hardware         | 300 Series Stainless Steel                                                                            |
| Encapsulant      | Epoxy Resin Hysol EE4215                                                                              |

C



## MICRO-D CBS BOARD MOUNT CONNECTOR DIMENSIONS

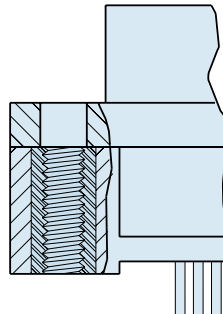
| Layout | A Max. |       | B              |                | C Max. |       | D Max. |      | E Max. |       | F              |                | G Max. |       |
|--------|--------|-------|----------------|----------------|--------|-------|--------|------|--------|-------|----------------|----------------|--------|-------|
|        | In.    | mm.   | In. $\pm .005$ | mm. $\pm 0.13$ | In.    | mm.   | In.    | mm.  | In.    | mm.   | In. $\pm .003$ | mm. $\pm 0.08$ | In.    | mm.   |
| 9P     | .785   | 19.94 | .565           | 14.35          | .333   | 8.46  | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .355   | 9.02  |
| 9S     | .785   | 19.94 | .565           | 14.35          | .400   | 10.16 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .355   | 9.02  |
| 15P    | .935   | 23.75 | .715           | 18.16          | .483   | 12.27 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .355   | 9.02  |
| 15S    | .935   | 23.75 | .715           | 18.16          | .551   | 14.00 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .355   | 9.02  |
| 21P    | 1.085  | 27.56 | .865           | 21.97          | .633   | 16.08 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .355   | 9.02  |
| 21S    | 1.085  | 27.56 | .865           | 21.97          | .701   | 17.81 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .355   | 9.02  |
| 25P    | 1.185  | 30.01 | .965           | 24.51          | .733   | 18.62 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .355   | 9.02  |
| 25S    | 1.185  | 30.01 | .965           | 24.51          | .801   | 20.35 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .355   | 9.02  |
| 31P    | 1.335  | 33.91 | 1.115          | 28.32          | .883   | 22.43 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .355   | 9.02  |
| 31S    | 1.335  | 33.91 | 1.115          | 28.32          | .951   | 24.16 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .355   | 9.02  |
| 37P    | 1.485  | 37.72 | 1.265          | 32.13          | 1.033  | 26.24 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .355   | 9.02  |
| 37S    | 1.485  | 37.72 | 1.265          | 32.13          | 1.101  | 27.96 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .355   | 9.02  |
| 51P    | 1.435  | 36.45 | 1.215          | 30.86          | .983   | 24.97 | .228   | 5.79 | .400   | 10.16 | .183           | 4.65           | .355   | 9.02  |
| 51S    | 1.435  | 36.45 | 1.215          | 30.86          | 1.051  | 26.70 | .296   | 7.52 | .400   | 10.16 | .195           | 4.95           | .355   | 9.02  |
| 69P    | 1.735  | 44.07 | 1.515          | 38.48          | 1.284  | 32.61 | .224   | 5.69 | .400   | 10.16 | .183           | 4.65           | .355   | 9.02  |
| 69S    | 1.735  | 44.07 | 1.515          | 38.48          | 1.350  | 34.29 | .293   | 7.44 | .400   | 10.16 | .195           | 4.95           | .355   | 9.02  |
| 100P   | 2.170  | 55.12 | 1.800          | 45.72          | 1.383  | 35.13 | .270   | 6.86 | .510   | 12.95 | .183           | 4.65           | .430   | 10.92 |
| 100S   | 2.170  | 55.12 | 1.800          | 45.72          | 1.451  | 36.86 | .333   | 8.46 | .510   | 12.95 | .195           | 4.95           | .430   | 10.92 |

#### MICRO-D CBS BOARD MOUNT CONNECTOR HARDWARE OPTIONS



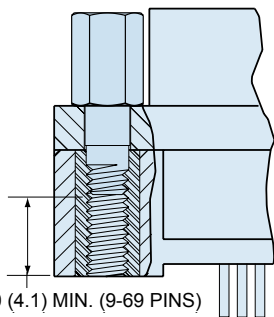
A DIAMETER  
9-69 CONTACTS  
.096/.088 (2.44/2.24)  
100 CONTACTS  
.150/.145 (3.81/3.68)

**NN Style**  
Thru-Hole, No Hardware



9-69 CONTACTS  
NO. 2-56 UNC-2B  
100 CONTACTS  
NO. 4-40 UNC-2B

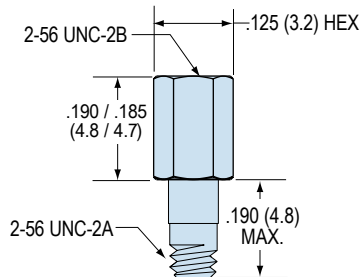
**NU Style**  
Threaded Insert



.160 (4.1) MIN. (9-69 PINS)  
.225 (5.7) MIN. (100 PIN)

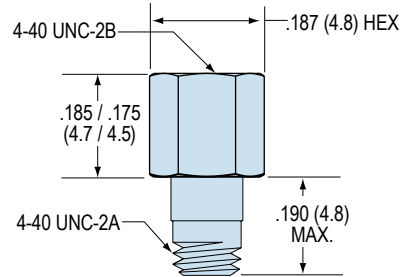
**PU Style**  
Jackpost with Threaded Insert

#### 9 - 69 Contacts

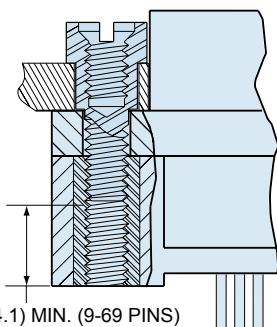


Kit Part Number **500-063-1**  
Kit Consists of Two Jackposts

#### 100 Contacts



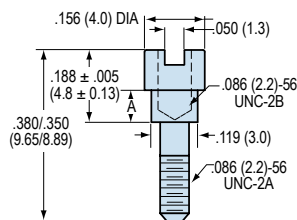
Kit Part Number **500-063-2**  
Kit Consists of Two Jackposts



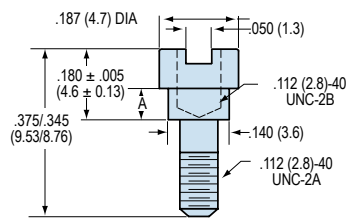
.160 (4.1) MIN. (9-69 PINS)  
.225 (5.7) MIN. (100 PIN)

**RU Style**  
Jackpost For Rear Panel  
Mounting, with Threaded Insert

#### 9 - 69 Contacts



#### 100 Contacts



| Hardware Option | Panel Thickness | Part Number   | A<br>± .003 (0.08) | Hardware Option | Panel Thickness | Part Number   | A<br>± .003 (0.08) |
|-----------------|-----------------|---------------|--------------------|-----------------|-----------------|---------------|--------------------|
| R2U             | 1/32 (0.8)      | 177-505-A-2-2 | .024 (0.6)         | R2U             | 1/32 (0.8)      | 177-505-D-4-2 | .024 (0.6)         |
| R3U             | 3/64 (1.2)      | 177-505-A-2-3 | .041 (1.0)         | R3U             | 3/64 (1.2)      | 177-505-D-4-3 | .041 (1.0)         |
| R4U             | 1/16 (1.6)      | 177-505-A-2-4 | .055 (1.4)         | R4U             | 1/16 (1.6)      | 177-505-D-4-4 | .055 (1.4)         |
| R5U             | 3/32 (2.4)      | 177-505-A-2-5 | .086 (2.2)         | R5U             | 3/32 (2.4)      | 177-505-D-4-5 | .086 (2.2)         |
| R6U             | 1/8 (3.2)       | 177-505-A-2-6 | .118 (3.0)         | R6U             | 1/8 (3.2)       | 177-505-D-4-6 | .118 (3.0)         |

# Micro-D Printed Circuit Board Connectors Condensed Board Straight CBS .075 Inch Spacing

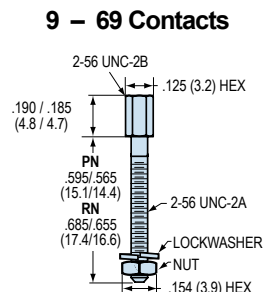


Micro-D  
PCB

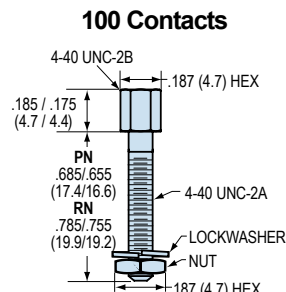
## MICRO-D CBS BOARD MOUNT CONNECTOR HARDWARE OPTIONS



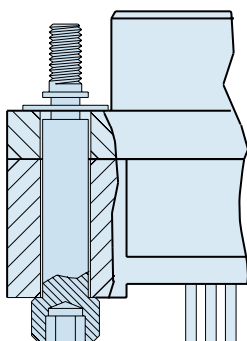
**PN** Style for .062" PCB  
**RN** Style for .196" PCB  
Jackpost Kit



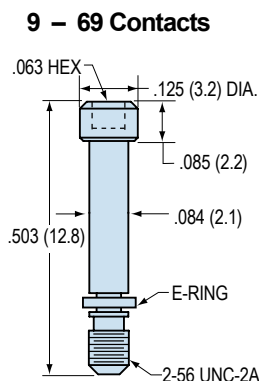
PN Kit Part Number **500-069-2-6**  
RN Kit Part Number **500-069-2-7**  
Kit Consists of 2 Jackposts, 2 Nuts, 2 Washers



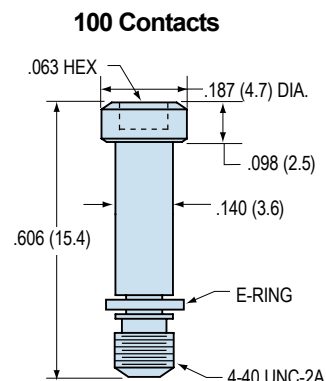
PN Kit Part Number **500-069-4-7**  
RN Kit Part Number **500-069-4-8**  
Kit Consists of 2 Jackposts, 2 Nuts, 2 Washers



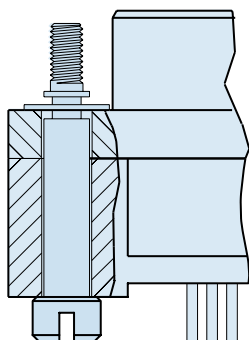
**M** Style  
Hex Head Jackscrew with  
E-Ring



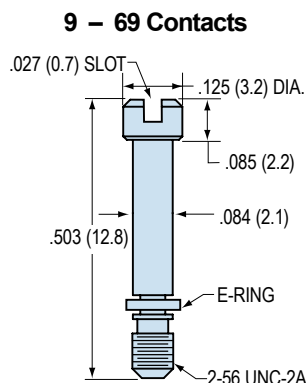
Kit Part Number **500-080-2**  
Kit Consists of 2 Jackscrews and 2 E-Rings



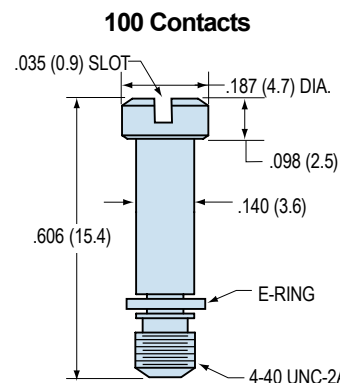
Kit Part Number **500-080-4**  
Kit Consists of 2 Jackscrews and 2 E-Rings



**S** Style  
Slot Head Jackscrew with  
E-Ring



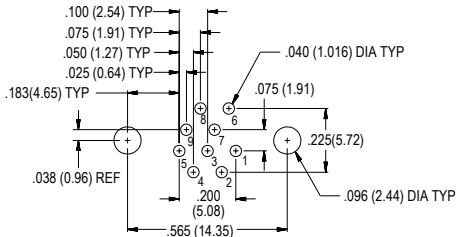
Kit Part Number **500-081-2**  
Kit Consists of 2 Jackscrews and 2 E-Rings



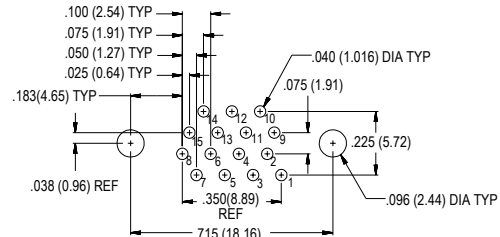
Kit Part Number **500-081-4**  
Kit Consists of 2 Jackscrews and 2 E-Rings

Patterns shown are for connector mounting side of PC board.

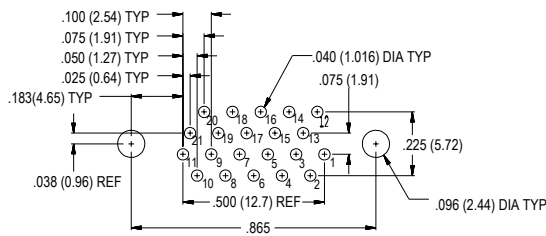
### MICRO-D CBS BOARD MOUNT CONNECTOR PCB LAYOUTS – PIN CONNECTORS



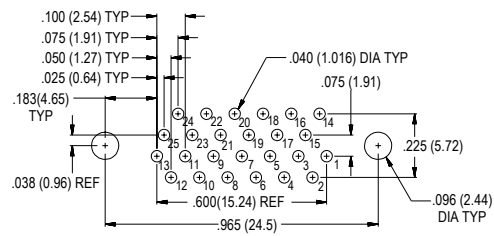
**9 PIN MWDM-9PCBS**



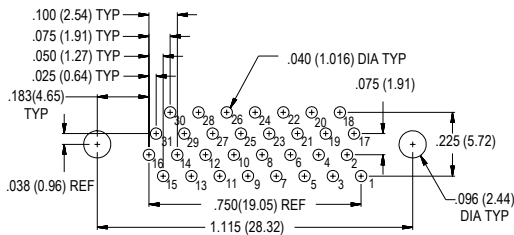
**15 PIN MWDM-15PCBS**



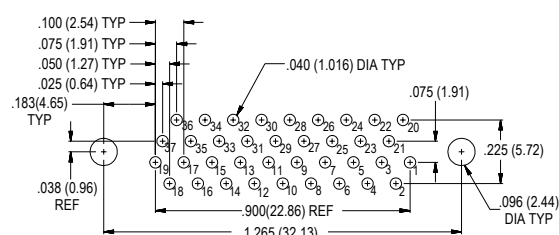
**21 PIN MWDM-21PCBS**



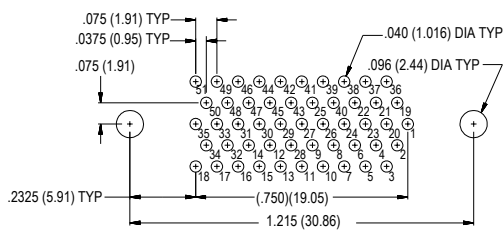
**25 PIN MWDM-25PCBS**



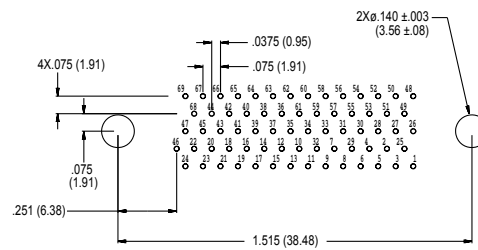
**31 PIN MWDM-31PCBS**



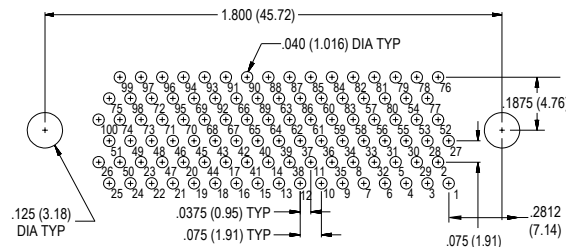
**37 PIN MWDM-37PCBS**



**51 PIN MWDM-51PCBS**



**69 PIN MWDM-69PCBS**



**100 PIN MWDM-100PCBS**

# Micro-D Printed Circuit Board Connectors Condensed Board Straight CBS .075 Inch Spacing



Micro-D  
PCB

Patterns shown are for connector mounting side of PC board.

## MICRO-D CBS BOARD MOUNT CONNECTOR PCB LAYOUTS – SOCKET CONNECTORS



**9 Socket MWDM-9SCBS**



**15 Socket MWDM-15SCBS**



**21 Socket MWDM-21SCBS**



**25 Socket MWDM-25SCBS**



**31 Socket MWDM-31SCBS**



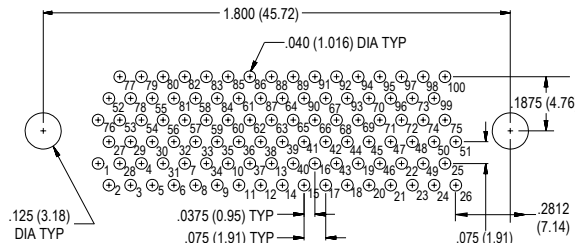
**37 Socket MWDM-37SCBS**



**51 Socket MWDM-51SCBS**



**69 Socket MWDM-69SCBS**



**100 Socket MWDM-100SCBS**

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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