

# **IC Sockets and Interconnection Panels**

## IC SOCKETS AND INTERCONNECTION PANELS

Texas Instruments lines of off-the-shelf interconnection products are designed specifically to meet the performance needs of volume commercial applications. They provide both the economy of a standard product line and performance features developed after many year's experience with custom designs. Foremost among these is our ability to selectively bond a wrought gold stripe at the contact point. No waste. Reduced cost. Reliable contacts.

### Wrought Gold Contact

Plate a contact with gold and you get a better contact. More reliable, longer lasting. Increase the gold, you improve the contact. But gold is precious, so improved performance has to be costly — right? Wrong. Because now you can get the gold only where it is needed — at the point of contact.

How? With selective metallurgical bonding; a gold stripe inlay. Not porous plating, but durable wrought gold bonded to the contact by the same technology used to produce clad coins and thermostat metals.

Texas Instruments, Attleboro, Massachusetts, is the world's largest producer of these multimetal systems. We also know our way around electronics. The result? A full line of reliable, low cost, interconnection systems featuring an extra measure of gold where it's needed. Premium performance at no premium in price.

### IC Sockets

Texas Instruments family of IC sockets includes every type and size in common use today, and as wide a choice of contact materials as you'll find anywhere. Choose from open or closed entry *wire-wrapped*<sup>†</sup> sockets, standard or low profile solder tail sockets, cable plugs, and component platforms. Sizes from 8 to 40 pins.

### IC Panels

To match the industry's broadest line of IC sockets TI offers one of the industry's widest selections of off-the-shelf socket panel products. Logic panels. Logic cards. Accessories. Add TI's custom design capability and wire wrapping for full service.

Additional information including pricing and delivery quotations may be obtained from your nearest TI Distributor, TI Representative, or:

Texas Instruments Incorporated  
Connector Systems Department  
MS 2-16  
Attleboro, Massachusetts 02703  
Telephone: (617) 222-2800  
TELEX: ABORA927708

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<sup>†</sup>Registered trademark of Gardner-Denver

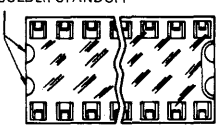
# LOW PROFILE SOCKETS

## SOLDER TAIL

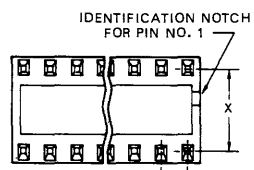
C-93 SERIES GOLD-CLAD CONTACTS  
C-83 SERIES TIN-PLATED CONTACTS

- Universal mounting and packaging
- Anti-wicking wafer
- Stand-off tabs on base for solder flush
- Redundant contact points for low contact resistance, high reliability and repetitive insertion
- Closed entry construction

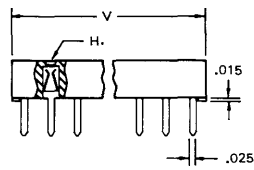
**SOLDER STANDOFF**



**IDENTIFICATION NOTCH FOR PIN NO. 1**



**TOLERANCE NON-CUMULATIVE**

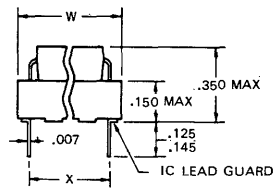


**MATERIAL:**

A. Body-glass filled nylon (GFN)  
B. Contact-copper nickel alloy  
C. Finish-see part number schedule

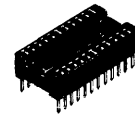
**NOTES:**

A. Sockets meet requirements of Texas Instruments test specification TS-0005 and test report TR-0003  
B. Operating temperature  $-65^{\circ}\text{C}$  to  $\pm 150^{\circ}\text{C}$   
C. Contacts have redundant spring elements  
D. Accommodates standard IC leads up to .024" square, rectangular, or .024" diameter  
E. Contact is designed and oriented in the plastic body to generate maximum possible contact pressure  
F. Socket is designed to achieve maximum density on boards  
G. Sockets may be mounted end to end on .100" centers continuous line or on .400" centers row to row  
H. Socket is designed to prevent IC leads from contacting P.C. board  
I. Closed entry feature provided to facilitate automatic IC insertion and protects the IC leads against damage



	8 Pin	14 Pin	16 Pin	18 Pin	20 Pin	22 Pin	24 Pin	28 Pin	40 Pin
Dimension X $\pm .005$	.300	.300	.300	.300	.300	.400	.600	.600	.600
Dimension V $\pm .010$	.400	.700	.800	.900	1.000	1.100	1.200	1.400	2.000
Dimension W (max)	.400	.400	.400	.400	.400	.500	.700	.700	.700

### PART NO. SCHEDULE



BLACK BODY

NOMEX ANTI-WICKING WAFER		
Pins	C-93 SERIES	C-83 SERIES
8	C930810	C830810
14	C931410	C831410
16	C931610	C831610
18	C931810	C831810
20	C932010	C832010
22	C932210	C832210
24	C932410	C832410
28	C932810	C832810
40	C934010	C834010

### CONTACT FINISH

- C-93 SERIES:  
100 microinch minimum gold stripe inlay
- C-83 SERIES:  
200 microinch minimum bright tin plate

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# STANDARD PROFILE SOCKET

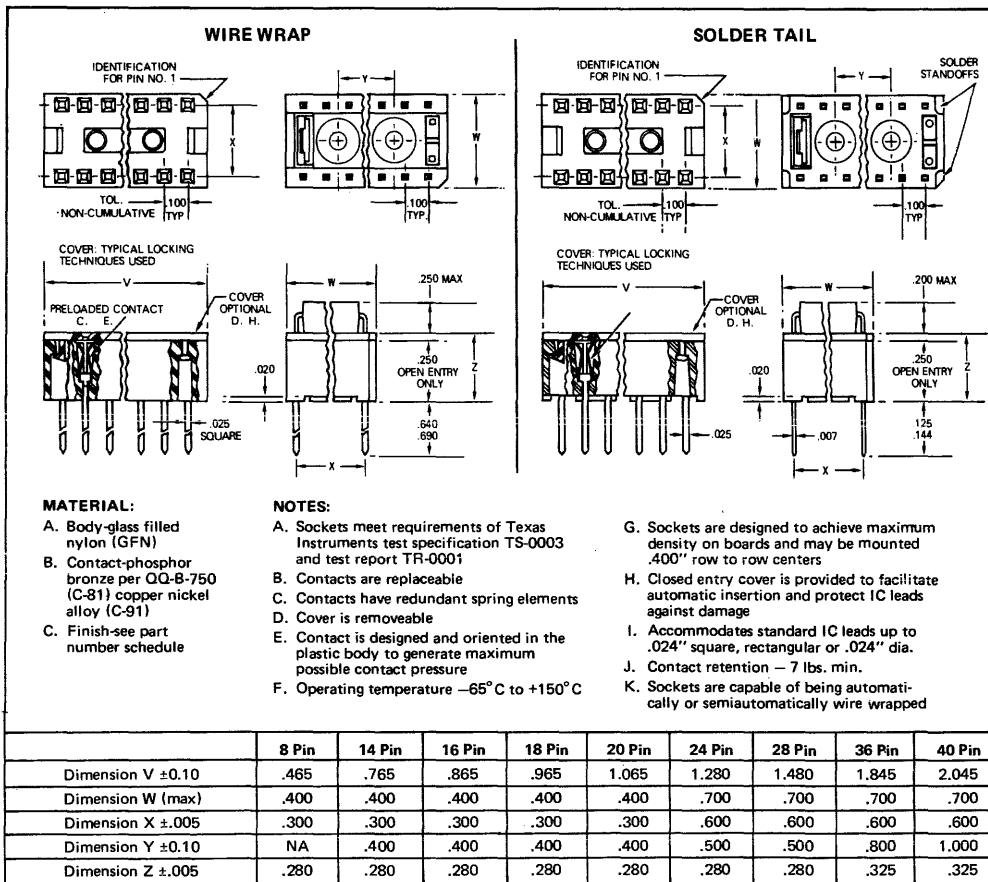
## SOLDER TAIL

C-82 SERIES PLATED CONTACTS • C-92 SERIES GOLD CLAD CONTACTS

## WIRE WRAP



C-81 SERIES PLATED CONTACTS • C-91 SERIES GOLD CLAD CONTACTS

- Designed for low cost, reliable, high density production packaging
- Universal mounting and packaging capabilities
- 8 to 40 pin lead configurations
- Contacts accommodate .015" through .024" rectangular or round dual-in-line leads
- Wire wrap posts held to true position of .015" providing a true position of .020" on boards for efficient automatic wire wrapping





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**WIRE WRAP**

		OPEN ENTRY	CLOSED ENTRY
<b>PART NUMBER SCHEDULE</b>			
Contact Finish	Pins	Black Body	Black Cover
Series <b>C-81</b> 200-400 microinch min tin per MIL-T-10727	8	C810854	C810804
	14	C811454	C811404
	16	C811654	C811604
	18	C811854	C811804
	20	C812054	C812004
	24	C812454	C812404
	28	C812854	C812804
36	C813604	C813604	
40	C814004	C814004	
Series <b>C-91</b>  50 microinch min tin gold stripe inlay	8	C910850	C910800
	14	C911450	C911400
	16	C911650	C911600
	18	C911450	C911400
	20	C912050	C911800
	24	C912450	C912000
	28	C912850	C912800
	36	C913600	C913600
40	C914000	C914000	

**SOLDER TAIL**

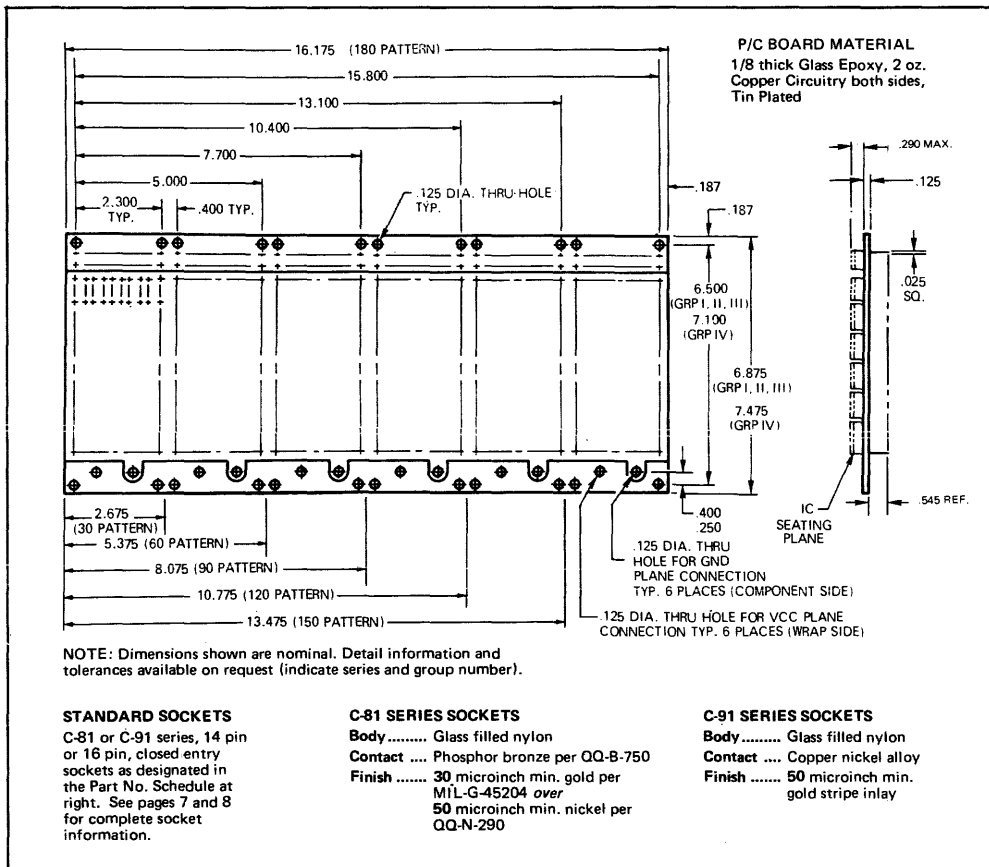
		OPEN ENTRY	CLOSED ENTRY
<b>PART NUMBER SCHEDULE</b>			
Contact Finish	Pins	Black Body	Black Cover
Series <b>C-82</b> 30 microinch min gold per MIL-G-45204 over 50 microinch min nickel per QQ-N-290	8	C820850	C820800
	14	C821450	C821400
	16	C821650	C821600
	18	C821850	C821800
	24	C822450	C822400
	28	C822850	C822800
	36	C823600	C823600
40	C824000	C824000	
Series <b>C-82</b> 50 microinch min gold per MIL-G-45204 over 100 microinch min nickel per QQ-N-290	8	C820852	C820802
	14	C821452	C821402
	16	C821652	C821602
	18	C821852	C821802
	24	C822452	C822402
	28	C822852	C822802
	36	C823602	C823602
40	C824002	C824002	
Series <b>C-82</b> 200-400 microinch min tin per MIL-T-10727	8	C820854	C820804
	14	C821454	C821404
	16	C821654	C821604
	18	C821854	C821604
	24	C822454	C822404
	28	C822854	C822804
	36	C823604	C823604
40	C824004	C824004	
Series <b>C-92</b>  100-microinch min gold stripe inlay	8	C920850	C920800
	14	C921450	C921400
	16	C921650	C921600
	18	C921850	C921800
	24	C922450	C922400
	28	C922850	C922800
	36	C923600	C923600
40	C924000	C924000	

# SOCKET PANELS

## STANDARD

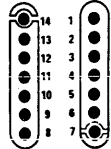

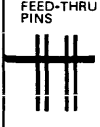
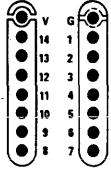

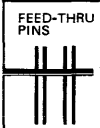
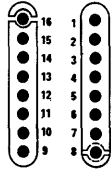


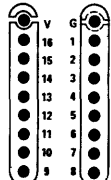


### D4 SERIES

- 180 position panel or multiples of 30 position with 14 or 16 position socket pattern
- I/O - 4 rows with 13 pins per row or 3 - 14 pin sockets
- Low cost standard hardware
- Available in 98 standard series
- Off-the-shelf availability



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STANDARD PANEL PART NO. SCHEDULE —D4 Series

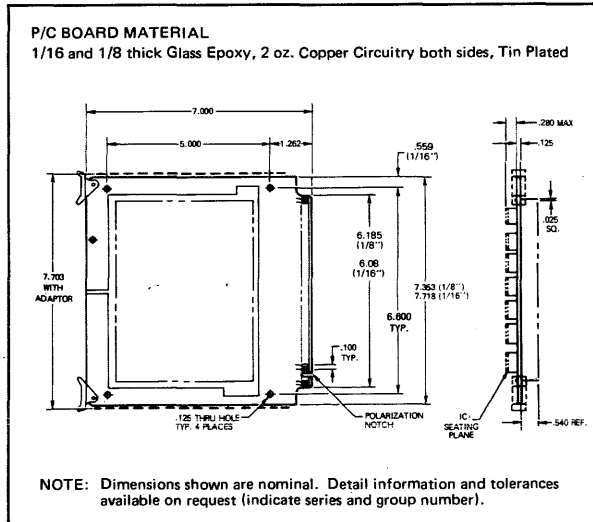
Group No.	I/O Option	Sockets Per Panel	C-81 Sockets	C-91 Sockets
<b>Group I 14 Pin</b> PIN 14 ..... VCC PIN 7 ..... GRD 	SOCKETS 	30 60 90 120 150 180	D411211 D411212 D411213 D411214 D411215 D411216	D411231 D411232 D411233 D411234 D411235 D411236
	FEED-THRU PINS 	30 60 90 120 150 180	D411411 D411412 D411413 D411414 D411415 D411416	D411431 D411432 D411433 D411434 D411435 D411436
<b>Group II 14 Pin</b> PIN V ..... VCC PIN G ..... GRD 	SOCKETS 	30 60 90 120 150 180	D434211 D434212 D434213 D434214 D434215 D434216	D434231 D434232 D434233 D434234 D434235 D434236
	FEED-THRU PINS 	30 60 90 120 150 180	D434411 D434412 D434413 D434414 D434415 D434416	D434431 D434432 D434433 D434434 D434435 D434436
<b>Group III 16 Pin</b> PIN 16 ..... VCC PIN 8 ..... GRD 	SOCKETS 	30 60 90 120 150 180	D423211 D423212 D423213 D423214 D423215 D423216	D423231 D423232 D423233 D423234 D423235 D423236
	FEED-THRU PINS 	30 60 90 120 150 180	D423411 D423412 D423413 D423414 D423415 D423416	D423431 D423432 D423433 D423434 D423435 D423436
<b>Group IV 16 Pin</b> PIN V ..... VCC PIN G ..... GRD 	SOCKETS 	30 60 90 120 150 180	D444211 D444212 D444213 D444214 D444215 D444216	D444231 D444232 D444233 D444234 D444235 D444236
	FEED-THRU PINS 	30 60 90 120 150 180	D444411 D444412 D444413 D444414 D444415 D444416	D444431 D444432 D444433 D444434 D444435 D444436

# SOCKET CARDS

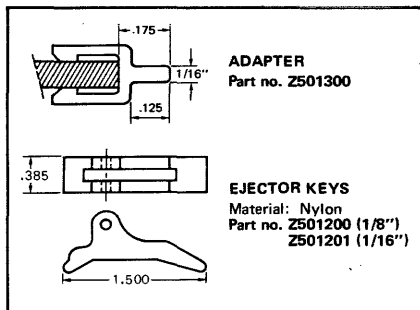
## STANDARD

### DO2 SERIES

- Low Cost
- 14 - 16 pin socket pattern – 60 position
- Standard ground and power pin commitment
- 8 standard designs
- Mates with dual 60 position edge connector



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### DO Series MULTIPURPOSE CARD PART NO. SCHEDULE

I/O	
Board Thk.	Part No.
1/16"	Z012510
1/8"	Z011510

### DO2 Series STANDARD CARD PART NO. SCHEDULE

Group No.	Board Thk.	C-81 Sockets	C-91 Sockets
Group I 14 Pin PIN 14 .... VCC PIN 7 ..... GRD	1/16"	D022110	D022130
	1/8"	D021110	D021130
Group II 14 Pin PIN V .... VCC PIN G .... GRD	1/16"	D022310	D022330
	1/8"	D021310	D021330
Group III 16 Pin PIN 16 .... VCC PIN 8 ..... GRD	1/16"	D022210	D022230
	1/8"	D021210	D021230
Group IV 16 Pin PIN V .... VCC PIN G .... GRD	1/16"	D022410	D022430
	1/8"	D021410	D021430