

**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

### **2.13.2 Connector Specifications**

#### **Characteristics of the EISA Connector**

Insertion Force:	28 lbs. typical for upper contacts (ISA) 35 lbs. maximum for both levels combined (Measured with a .062 steel gauge)
Durability:	100 cycles (minimum)
Contact Force:	.167 lbs. (75 grams) (minimum)
Contact Resistance:	Initial: 30 milliohms (maximum) End-of-life: 40 milliohms (maximum)
Current Carrying Capacity:	1 amp per contact on lower (EISA) contacts 3 amps per contact on upper (ISA) contacts This assures electrical compatibility with existing ISA expansion boards; a high level of current-carrying capacity on GND and +5V contacts may be required.

#### **Environmental Performance of the EISA Connector**

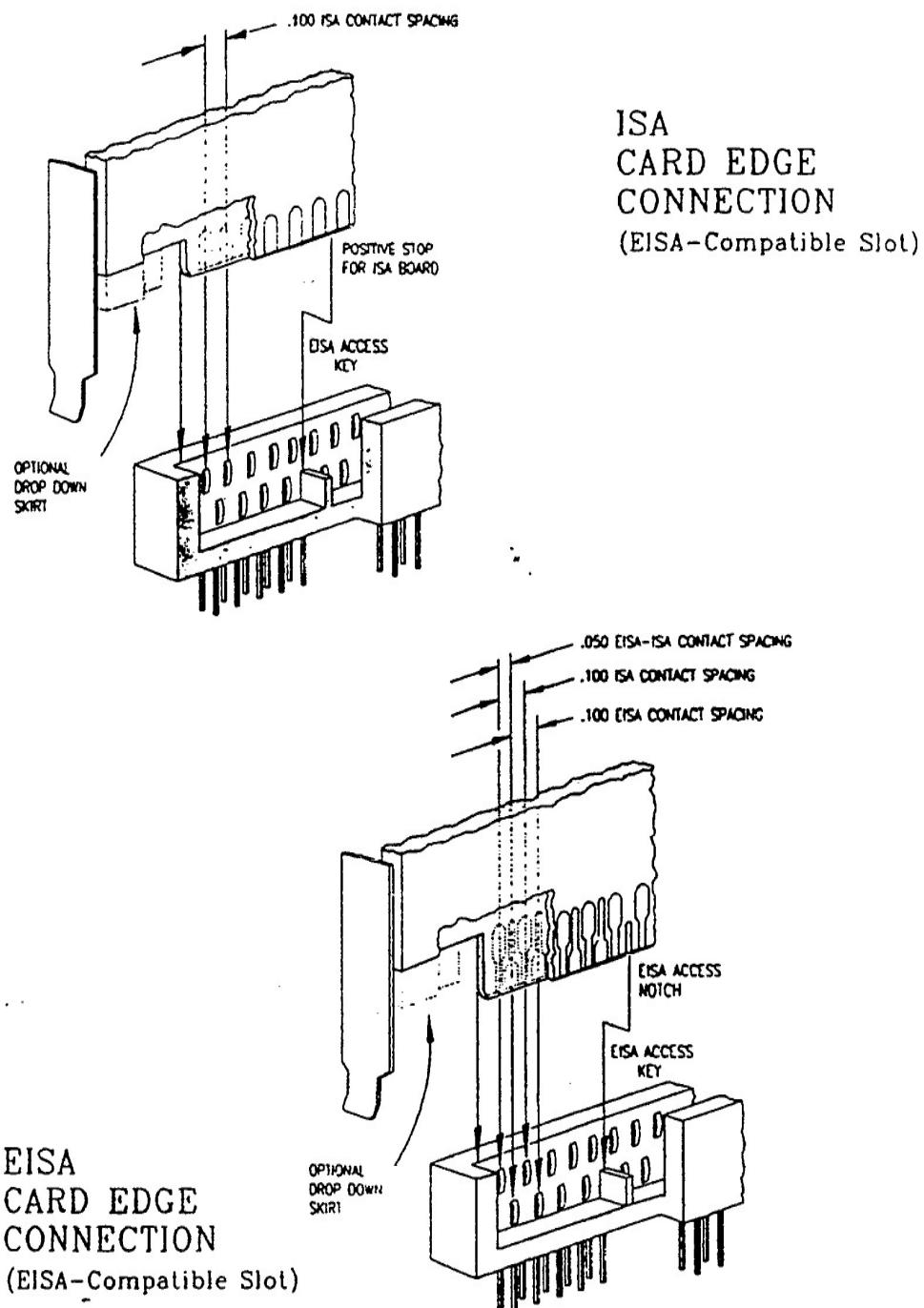
Thermal:	Contacts and housing will withstand vapor phase and surface mount process
Steady-state Humidity:	90-95% RH at 40 degrees C
Industrial Mixed Flowing Gas:	10 days, Class H
Vibration:	10 Gs, 10-500 Hz, 3 hours
Physical Shock:	100 Gs, 6 ms sawtooth, 18 shocks

#### **Connector Materials**

Housing:	Glass-filled thermoplastic UL 94 V-O
Contact:	Copper alloy
Contact Plating:	Gold flash over 40 microinches precious metal minimum over 50 microinches nickel minimum in the contact area; tin lead on the tails.

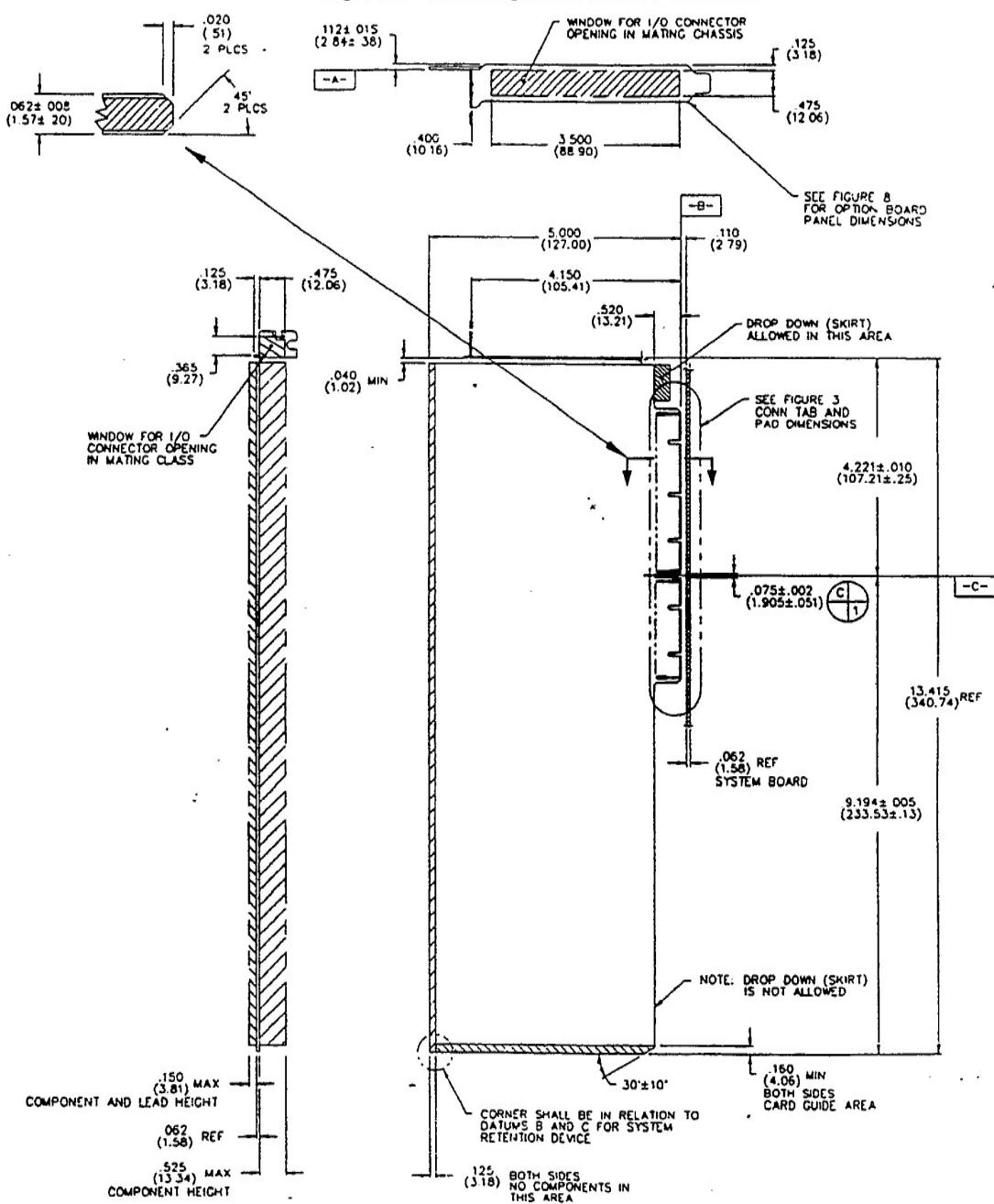
EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.

Figure 92 - EISA Connector and Card-edges



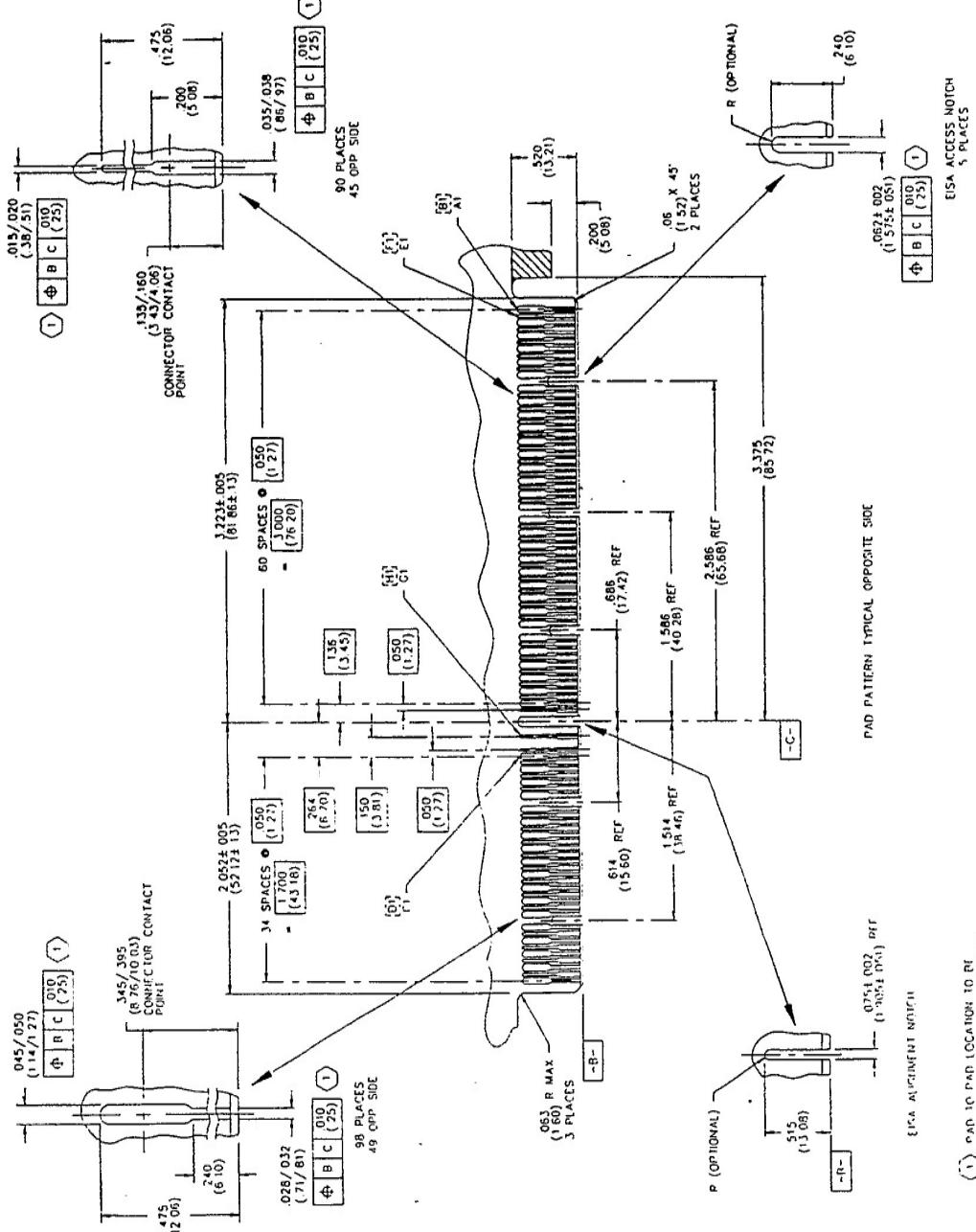
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 93 - EISA Expansion Board Dimensions**



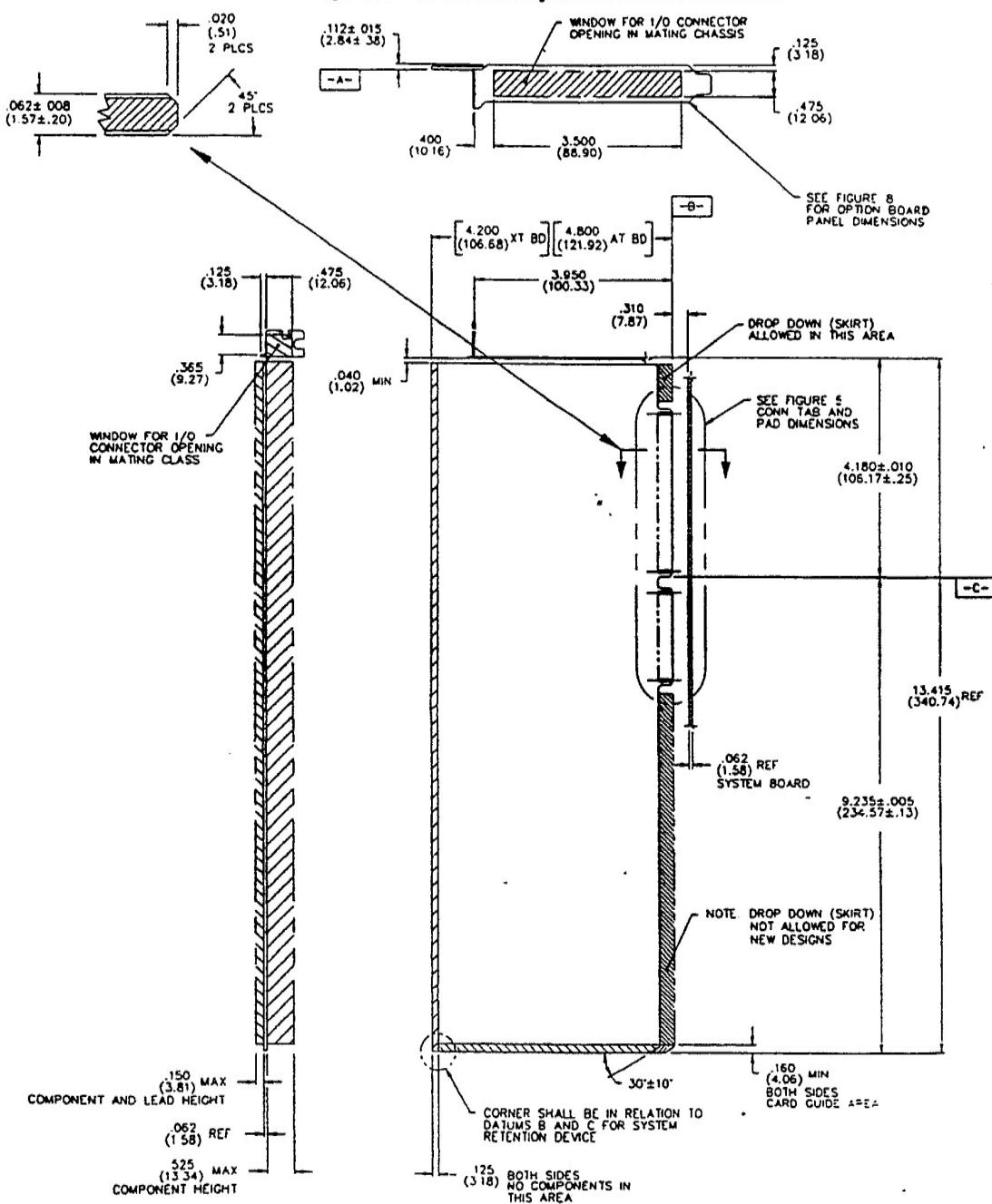
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 94 - EISA Expansion Board Card-edge Detail**



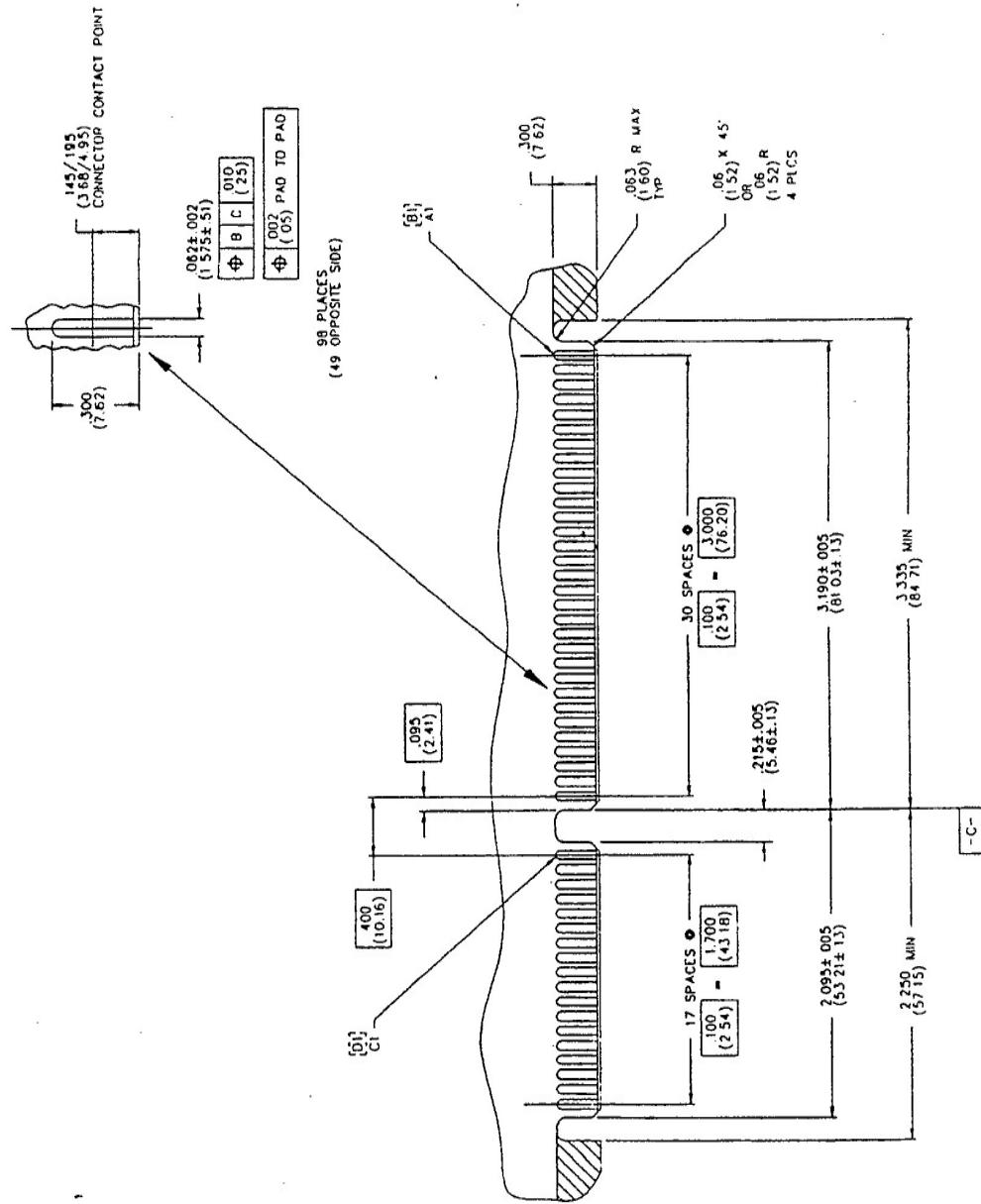
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 95 - 16-bit ISA Expansion Board Dimensions**



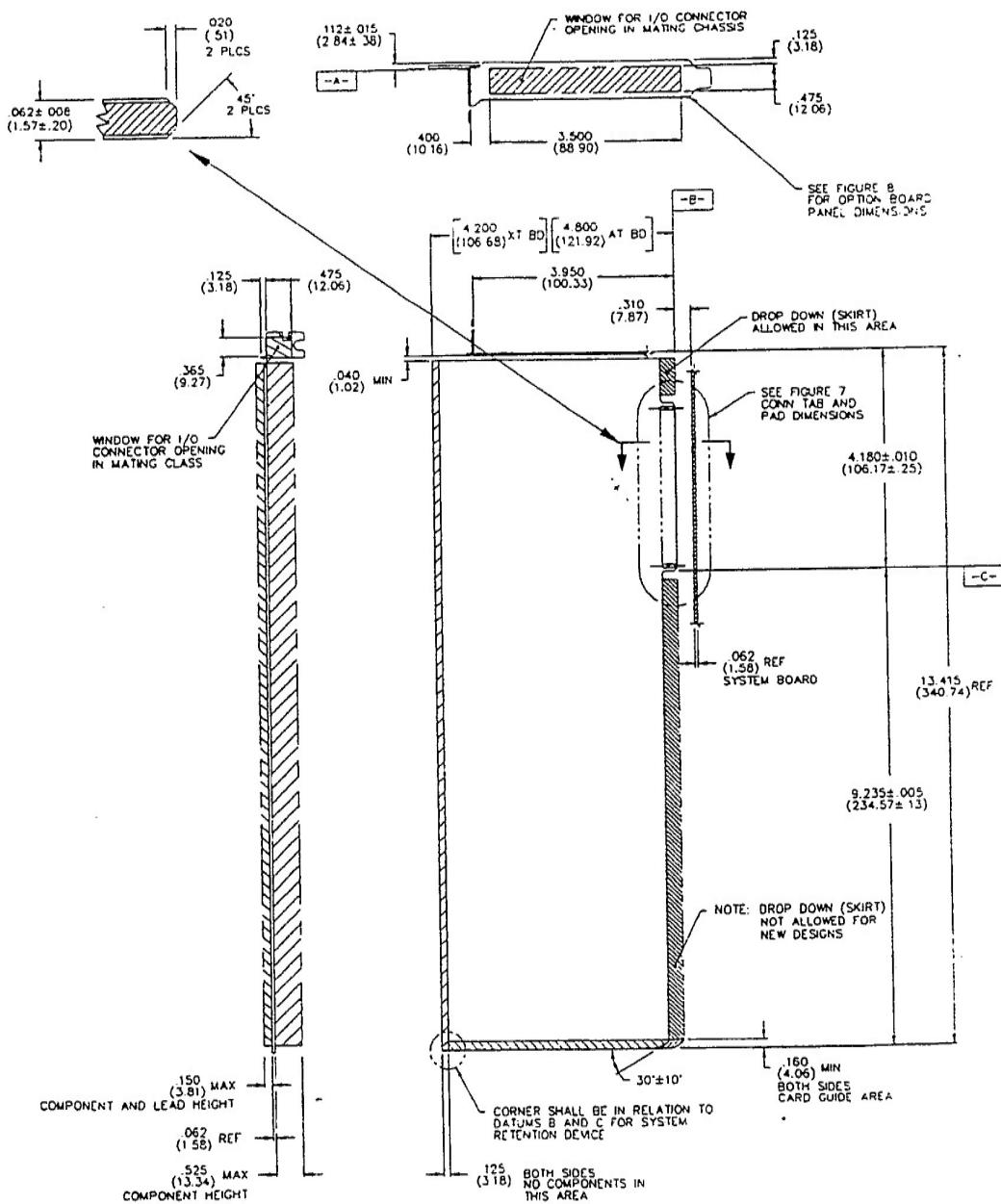
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 96 - 16-bit ISA Expansion Board Card-edge Detail**



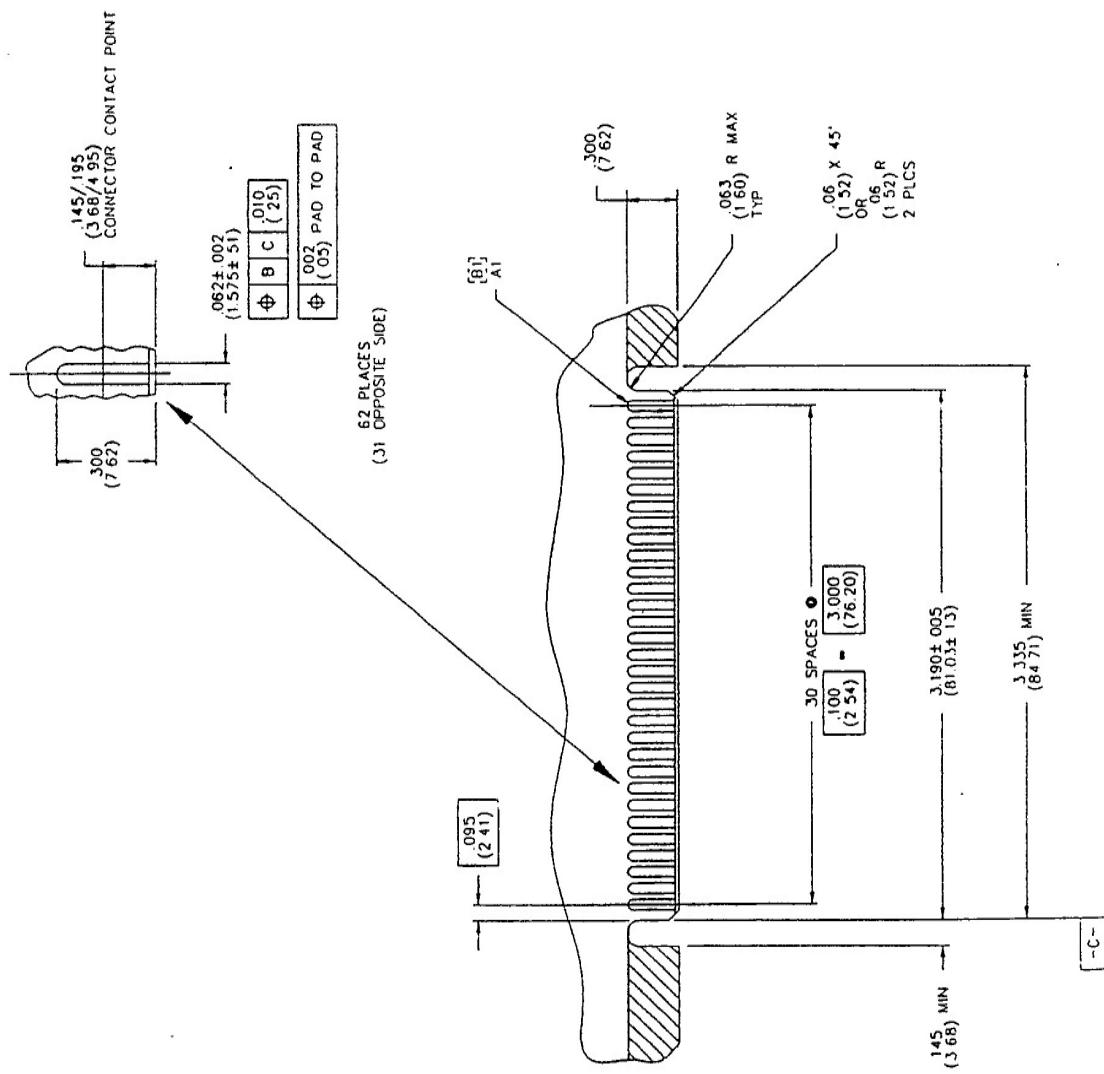
**EXTENDED INDUSTRY STANDARD ARCHITECTURE**  
**CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 97 - 8-bit ISA Expansion Board Dimensions**



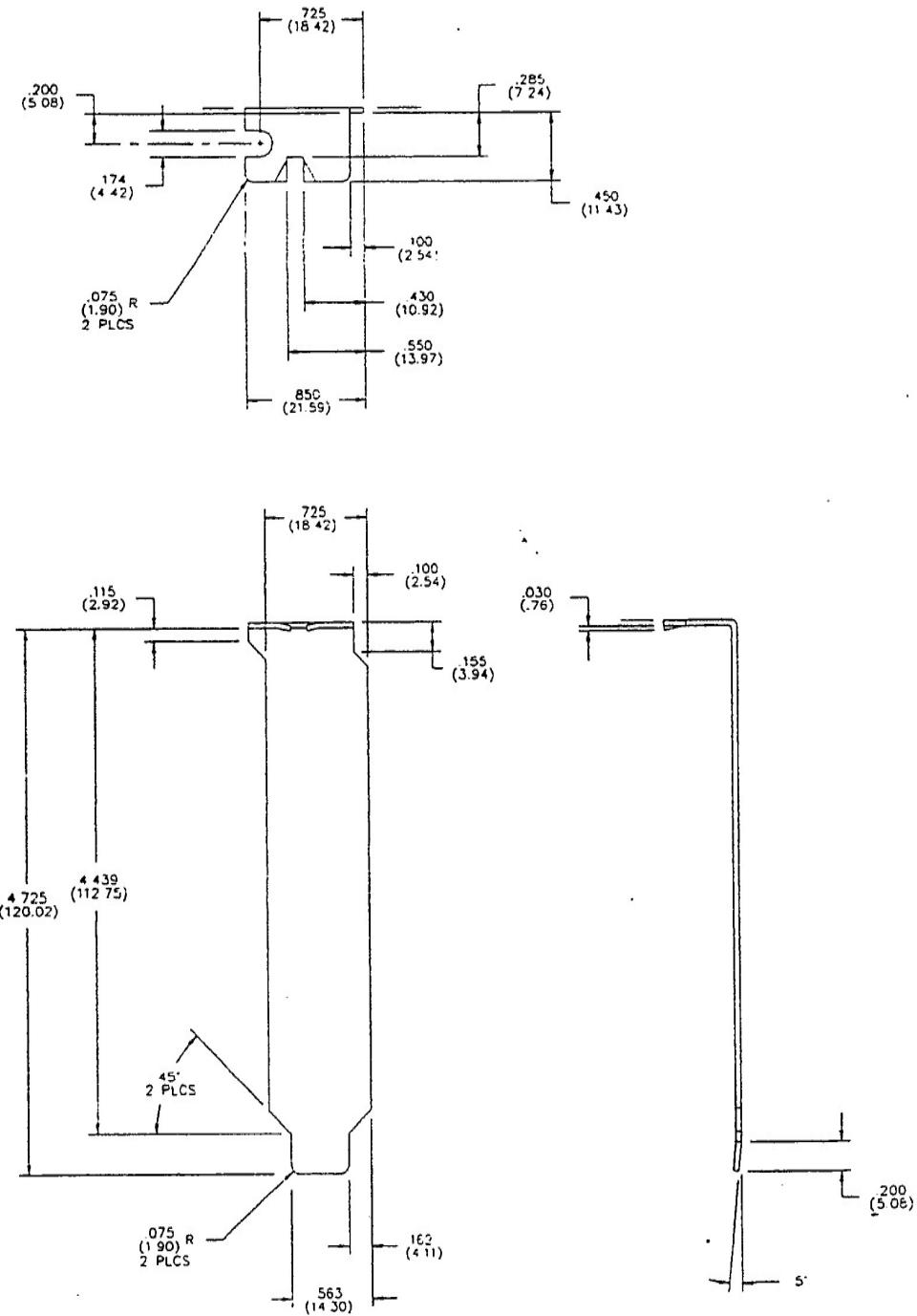
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 98 - 8-bit ISA Expansion Board Card-edge Detail**



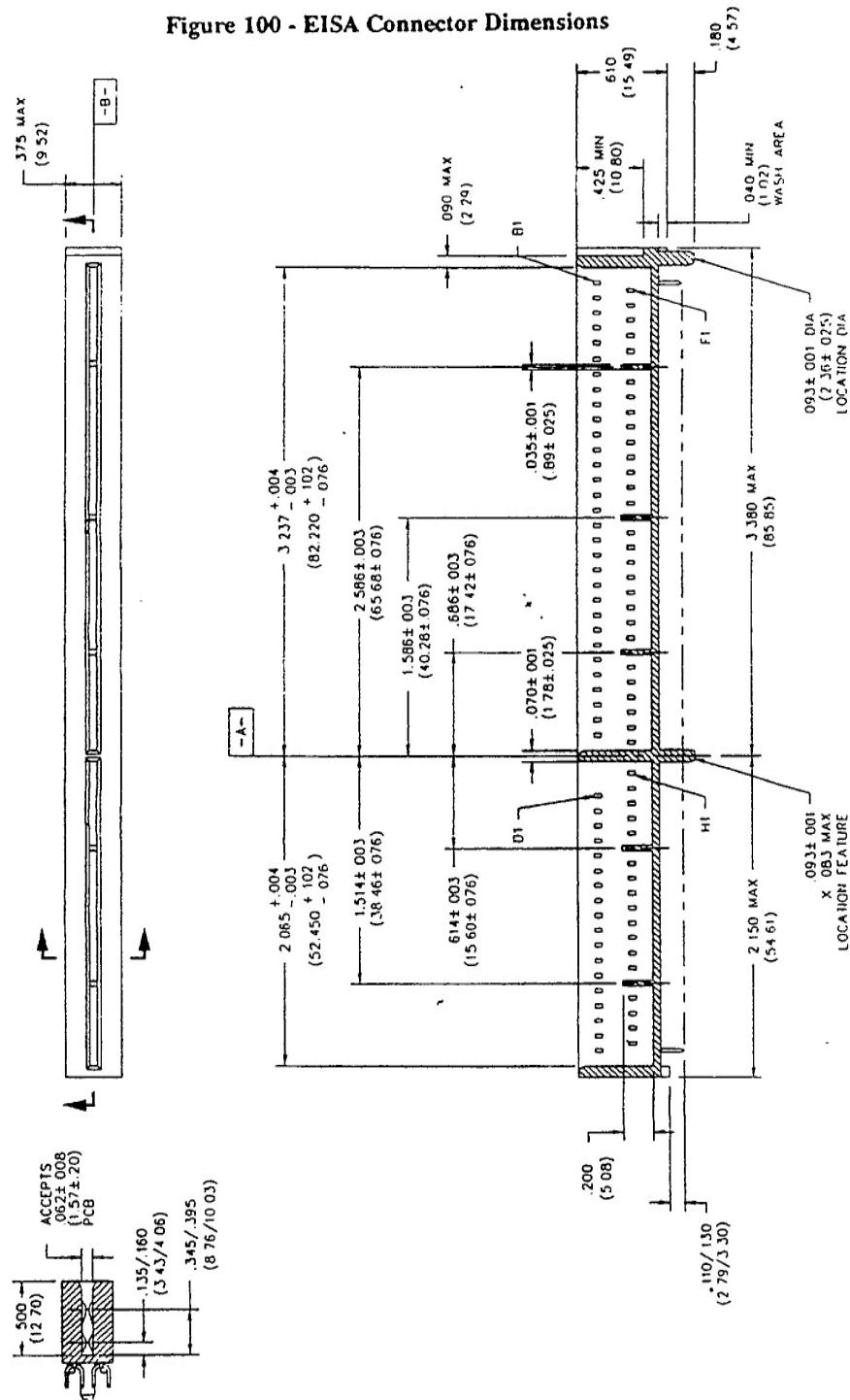
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 99 - EISA Expansion Board Mounting Bracket**



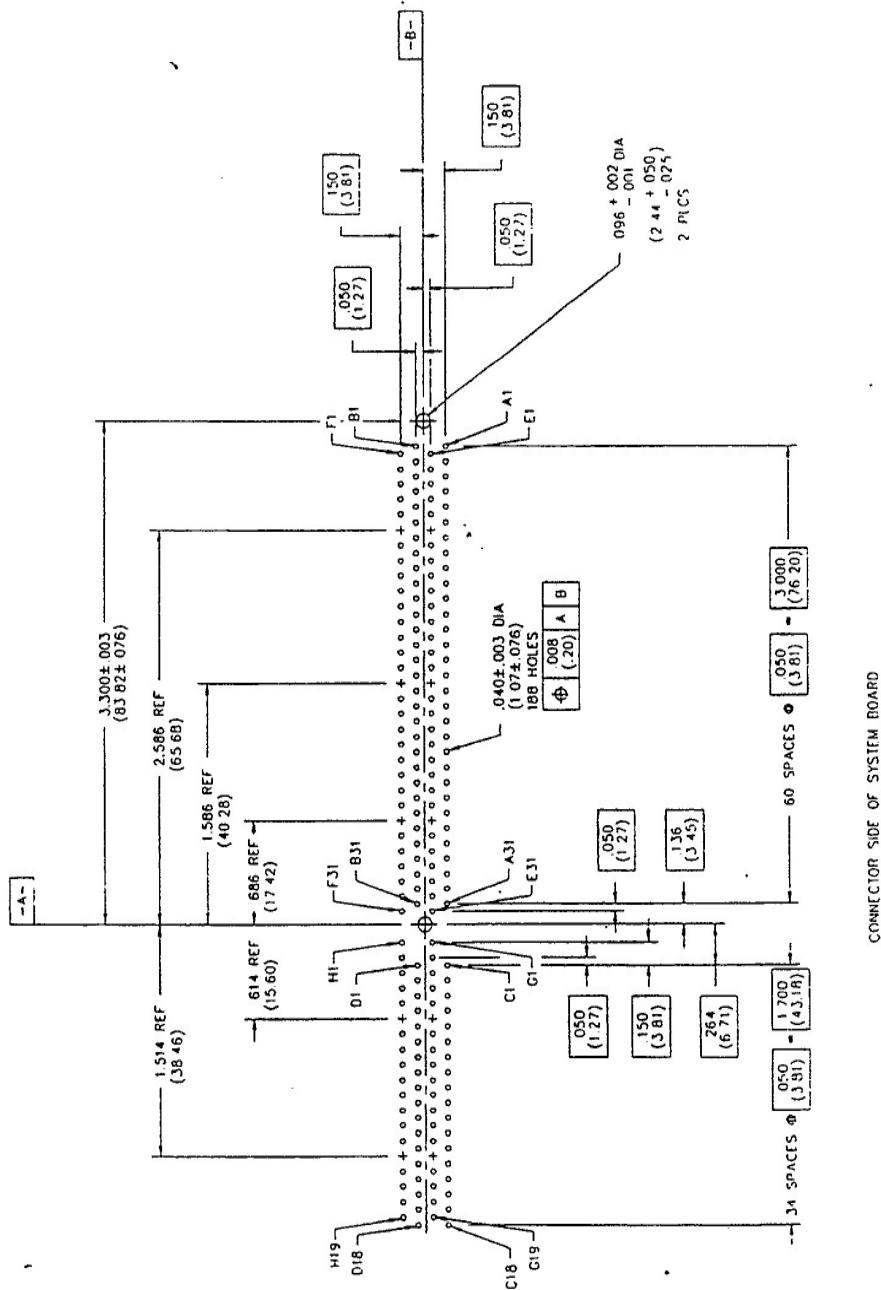
**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPK SERVICES, INC.**

Figure 100 - EISA Connector Dimensions



**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

**Figure 101 - EISA Connector System Board Drill Pattern**



EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.

### 2.13.3 Pin Description

This section provides a pin-out of the EISA connector. All 8- and 16-bit signals are included. Figure 102 on the following page illustrates a top view of the connector to show the pinout.

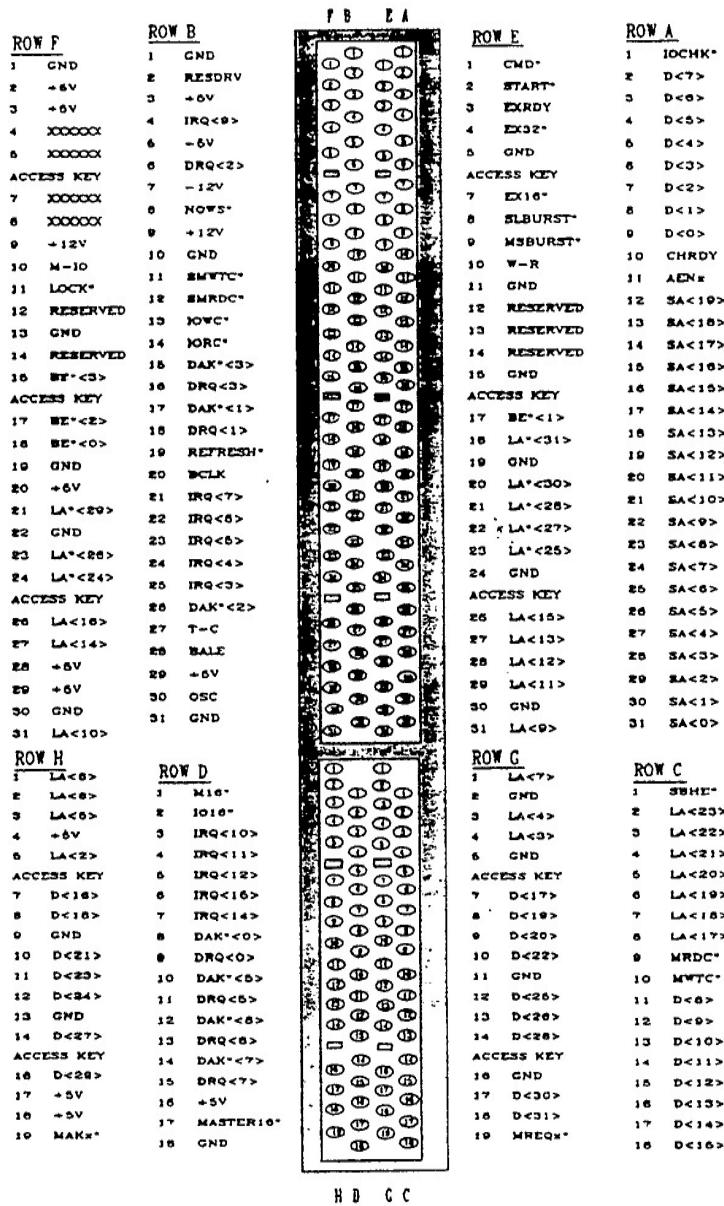
#### Note:

1. Reserved pins are for future use and will be assigned in the following order: E12, E13, E14, F12, F14.
2. XXXXXX pins are strictly for system manufacturer-specific use. Generally, these signals should not be connected and should be used to isolate signals on the bus from adjacent power pins.

EISA expansion boards should NOT connect to XXXXXX pins.

**EXTENDED INDUSTRY STANDARD ARCHITECTURE  
CONFIDENTIAL INFORMATION OF BCPR SERVICES, INC.**

Figure 102 - EISA Pinout



Rows A, C, F and H are upper (ISA) contacts  
Rows B, D, E and G are lower (EISA) contacts