



**VITA 34 Working Group**  
**Scottsdale, Arizona**  
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## Observation:

VITA 34 and PICMG 3.0 specification efforts have identical goals for powering modules/cards through a dedicated connector.

- 48V DC dual redundant power
- Use DC to DC converters to get card level voltages
- Provide for system maintenance interface
- Provide for live insertion and extraction of modules/cards

## Observation:

The power connector configuration of each specification effort differs regarding total number of contacts and sequential mating requirements.

## Conclusion:

It may be advantageous for the VITA 34 working group to review the PICMG 3.0 power connector contact configuration to determine if elements may be applicable to VITA 34.

## PICMG 3.0 Power Connector Configuration and Sequencing

Contact Name	Sequencing
VRTN_A	1 <sup>ST</sup>
VRTN_B	1 <sup>ST</sup>
-48V_A	2 <sup>ND</sup>
-48V_B	3 <sup>RD</sup>
-48V_EARLY_A	1 <sup>ST</sup>
-48V_EARLY_B	1 <sup>ST</sup>
VRTN_MLBF_A	4 <sup>TH</sup>
VRTN_MLBF_B	4 <sup>TH</sup>
LOGIC_GND	1 <sup>ST</sup>
CHASSIS_GND	1 <sup>ST</sup>
4 IPM SIGNALS	Before 4 <sup>th</sup>
8 GEOGRAPHIC ADDRESS	Before 4 <sup>th</sup>

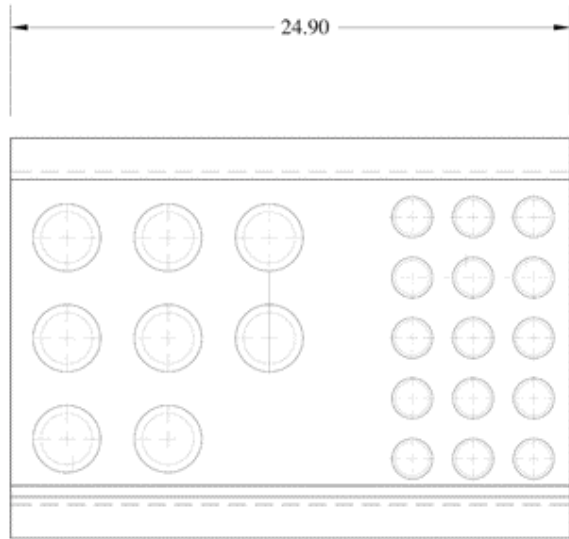
### 3.0 has additional contacts as follows:

- -48V\_EARLY A and B - (Precharge)
- VRTN\_MLBF A and B - (Enable)
- Logic Ground - (Reference ground for card logic)
- Chassis Ground - (EMI discharge for DC to DC converters)

### Additional Information:

- Incorporates four levels of sequential mating
 

1st mate	A & B Returns
	A & B Early
	Logic and Chassis Grounds
2nd mate	-48V A
3rd mate	-48V B
4th mate	Enables
- System maintenance contacts mate prior to enables



Configuration without keying or alignment  
24.90 mm length

Configuration with alignment  
34.60 mm length

