



Intel® Server Chassis SBCE Component Enabling Specification

Revision 2.0

December 1, 2003

Enterprise Platforms and Services Division



Revision History

Date	Revision Number	Modifications
3/27/03	1.0	Initial release
12/1/03	2.0	Update with new cordsets

Disclaimers

THIS DOCUMENT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE.

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications.

The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty.

This document contains information on products in the design phase of development. Do not finalize a design with this information. Revised information will be published when the product is available. Verify with your local sales office that you have the latest datasheet before finalizing a design.

The Server Blade Chassis Enterprise SBCE may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Intel and Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Copyright © Intel Corporation 2003. *Other names and brands may be claimed as the property of others.

Table of Contents

1. Overview	1
2. Enabled Components.....	1
2.1 Power Cables for the SBCE Chassis	1
2.1.1 SBCE System Power Specifications	1
3. 1400Watt Power Supply Cordsets.....	2
3.1 How to Purchase.....	2
3.1.1 1400Watt Power Supply Specifications	2
3.1.2 Cord and Service.....	2
3.1.3 North American 1400Watt Power Supply Cordsets	3
3.1.4 European 1400Watt Power Supply Cordsets.....	5
3.1.5 Chinese 1400Watt Power Supply Cordsets	7
3.1.6 United Kingdom 1400Watt Power Supply Cordsets.....	9
4. 1800Watt Power Supply Cordsets.....	11
4.1 How to Purchase.....	11
4.1.1 1800Watt Power Supply Specifications	11
4.1.2 Cord and Service.....	11
4.1.3 North American 1800Watt Power Supply Cordsets	12
4.1.4 European 1800Watt Power Supply Cordsets.....	14
4.1.5 Chinese 1800Watt Power Supply Cordsets	16
4.1.6 United Kingdom 1800Watt Power Supply Cordsets.....	17

< This page intentionally left blank. >

1. Overview

This document is provided to assist Intel's customers with the procurement of accessory components for the Intel® Server Chassis SBCE blade chassis.

The list of enabling components below will be discussed in this document. The following information is available for each component: a general description of the component and its function, current part numbers and revision levels, and vendor contact information.

- Power Cables

2. Enabled Components

2.1 Power Cables for the SBCE Chassis

The Intel® Server Chassis SBCE does not include power cordsets for the 1400Watt or 1800Watt power supplies. This is due to the unique requirements and the differing AC services in the various regions where the system may be shipped.

2.1.1 SBCE System Power Specifications

The maximum input/output power expectations of the SBCE unit are:

- | | |
|---------------------------------|---|
| • System power input (87% eff.) | 3218 W |
| • System power output: | 2800 W |
| • System power input/footprint: | 10 KW/m ² (946 W/ft ²) |
| • Rack input power (42 U): | 20.4 KW/Rack |
| • Rack output power (42 U): | 17.4 KW/Rack |

NOTE: Cordsets for the 1400Watt power supply and the 1800Watt power supply are not interchangeable. This is due to the differences in the power supply AC inlet connectors. The 1400Watt power supply uses an **IEC320 C14** (mates with C13 cord plug) AC input connector, while the 1800Watt power supply uses an **IEC320 C20** (mates with C19 cord plug) AC input connector.

3. 1400Watt Power Supply Cordsets

3.1 How to Purchase

Please refer to the vendor information below to aid in sourcing a suitable power cordset from the suppliers. These selections are assembled cordsets. Check power source outlets in order to determine if the selection is suitable. All selections should be further verified for the safety requirements of each application by a certified safety and regulatory professional

3.1.1 1400Watt Power Supply Specifications

The maximum input/output power expectations of the 1400Watt power supply are:

- Nominal Input Voltage 200-240VAC
- Minimal Input Voltage 180VAC
- Maximum Input Voltage 265 VAC
- Maximum Input Current < 10Amps
- AC Inlet connector IEC320 C14

NOTE: Cordsets for the 1400Watt power supply and the 1800Watt power supply are not interchangeable. This is due to the differences in the power supply AC inlet connectors. The 1400Watt power supply uses an **IEC320 C14** (mates with C13 cord plug) AC input connector, while the 1800Watt power supply uses an **IEC320 C20** (mates with C19 cord plug) AC input connector.

3.1.2 Cord and Service

The following criteria should be used for the wire cord and AC service selection for installation of the SBCE unit. The selections should be further verified for the safety requirements of each application, by a certified safety and regulatory professional.

- For North America, the cord must be UL Listed/CSA Certified, 18/3, 65°C type SJT/SVT, with NEMA 615, NEMA L-615, NEMA L-520 or equivalent attachment plug and IEC 320 **C13** plug outlet.
- For outside of North America, the cord must be flexible VDE certified or HAR rated 250V, 0.75mm minimum conductor size with IEC 320 C13 outlet, and rated for no less than the product ratings. The AC wall attachment plug shall be a three conductor grounding type, rated at 125% of the total input current rating and must be for the configuration of the specific region or country. The AC wall attachment plug must bear at least an accepted safety agency certification mark for the specific region or country.
- The cord must be no longer than 4.5 meters (14.76 feet).
- Do not attempt to modify or use an AC power cord that is not the exact type required.

3.1.3 North American 1400Watt Power Supply Cordsets

Description: North American Power Cordset w/C13 connector

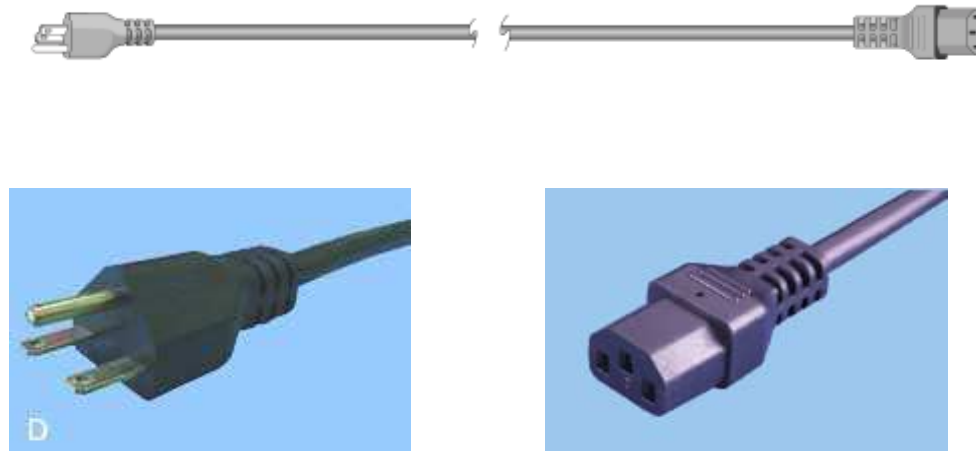


Figure 1

Vendor Name	InterPower Products
Part Number	86610100
Contact Telephone Number	1-800-662-2290
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	NEMA6-15P
Current Rating	10A
Voltage Rating	250VAC

Description: North American Power Cordset w/C13 Connector

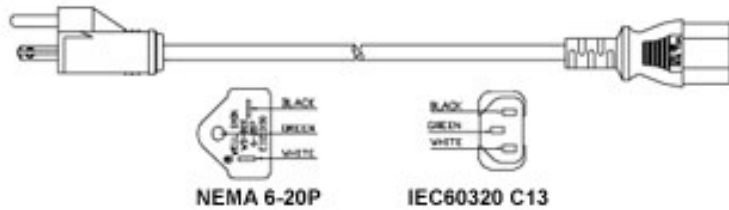


Figure 2

Vendor Name	Quail Electronics
Part Number	1694.096
Contact Telephone Number	(925) 373-6700
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C13
Supply End	NEMA6-20P
Current Rating	15A
Voltage Rating	250VAC

3.1.4 European 1400Watt Power Supply Cordsets

Description: Continental European Cordset w/C13 Connector



Figure 3

Vendor Name	InterPower Products
Part Number	86230110
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Suply End	Schuko
Current Rating	10A
Voltage Rating	250VAC

Description: Continental European Cordset w/C13 Connector

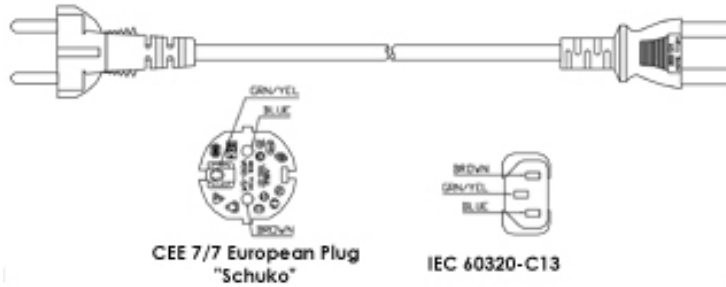


Figure 4

Vendor Name	Quail Electronics
Part Number	8500.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C13
Supply End	Schuko
Current Rating	10A
Voltage Rating	250VAC

3.1.5 Chinese 1400Watt Power Supply Cordsets

Description: Chinese 10Amp Cordset w/C13 Connector



Figure 5

Vendor Name	InterPower Products
Part Number	86517040
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	GB 2099-1-1996
Current Rating	10A
Voltage Rating	250VAC

Description: Chinese 10Amp Cordset w/C13 Connector

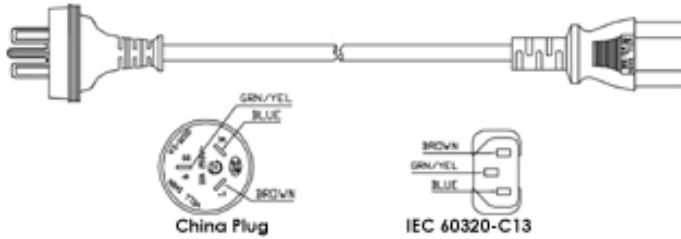


Figure 6

Vendor Name	Quail Electronics
Part Number	8590.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C13
Supply End	GB 2099-1-1996
Current Rating	10A
Voltage Rating	250VAC

3.1.6 United Kingdom 1400Watt Power Supply Cordsets

Description: United Kingdom Cordset w/C13 Connector

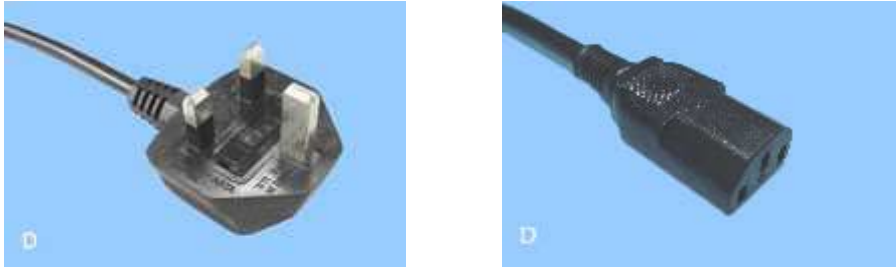


Figure 7

Vendor Name	InterPower Products
Part Number	86397060
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	U.K. Plug BS 1363
Current Rating	10A
Voltage Rating	250VAC

Description: United Kingdom Cordset w/C13 Connector

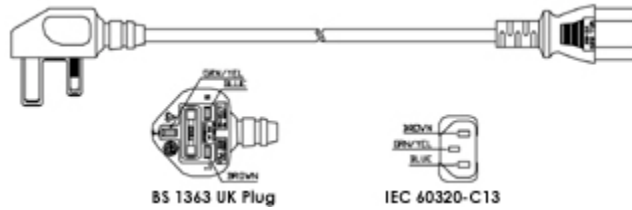


Figure 8

Vendor Name	Quail Electronics
Part Number	9650.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C13
Supply End	U.K. Plug BS 1363
Current Rating	10A
Voltage Rating	250VAC

4. 1800Watt Power Supply Cordsets

4.1 How to Purchase

Please refer to the vendor information below to aid in sourcing a suitable power cordset from the one of the suppliers. These selections are assembled cordsets. Check power source outlets in order to determine if the selection is suitable. All selections should be further verified for the safety requirements of each application by a certified safety and regulatory professional

4.1.1 1800Watt Power Supply Specifications

The maximum input/output power expectations of the 1800Watt power supply are:

- Nominal Input Voltage 200-240VAC
- Minimal Input Voltage 180VAC
- Maximum Input Voltage 265 VAC
- Maximum Input Current < 12Amps
- AC Inlet connector IEC320 C20

NOTE: Cordsets for the 1400Watt power supply and the 1800Watt power supply are not interchangeable. This is due to the differences in the power supply AC inlet connectors. The 1400Watt power supply uses an **IEC320 C14** (mates with C13 cord plug) AC input connector, while the 1800Watt power supply uses an **IEC320 C20** (mates with C19 cord plug) AC input connector.

4.1.2 Cord and Service

The following criteria should be used for the wire cord and AC service selection for installation of the SBCE unit. The selections should be further verified for the safety requirements of each application, by a certified safety and regulatory professional.

- For North America, the cord must be UL Listed/CSA Certified, 18/3, 65°C type SJT/SVT, with NEMA 615, NEMA L-615, NEMA L-520 or equivalent attachment plug and IEC 320 **C19** plug outlet.
- For outside of North America, the cord must be flexible VDE certified or HAR rated 250V, 0.75mm minimum conductor size with IEC 320 C19 outlet, and rated for no less than the product ratings. The AC wall attachment plug shall be a three conductor grounding type, rated at 125% of the total input current rating and must be for the configuration of the specific region or country. The AC wall attachment plug must bear at least an accepted safety agency certification mark for the specific region or country.
- The cord must be no longer than 4.5 meters (14.76 feet).
- Do not attempt to modify or use an AC power cord that is not the exact type required.

4.1.3 North American 1800Watt Power Supply Cordsets

Description: North American NEMA 6-15 Cordset w/Straight C19

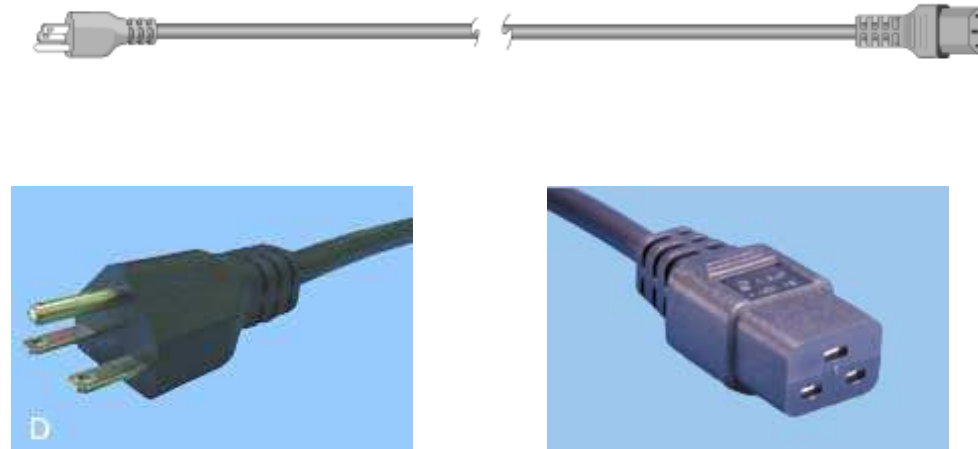


Figure 9

Vendor Name	InterPower Products
Part Number	86226060
Contact Telephone Number	1-800-662-2290
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C19
Supply End	NEMA 6-15
Current Rating	15A
Voltage Rating	250VAC

Description: North American NEMA L6-15P Cordset w/Straight C19

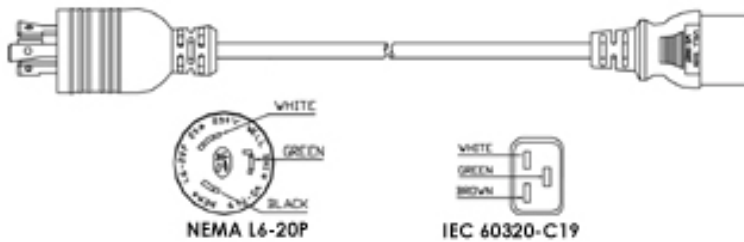


Figure 10

Vendor Name	Quail Electronics
Part Number	5083.098
Contact Telephone Number	(925) 373-6700
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C19
Supply End	NEMA L6-15P
Current Rating	15A
Voltage Rating	250VAC

4.1.4 European 1800Watt Power Supply Cordsets

Description: Continental European Cordset w/C19 Connector

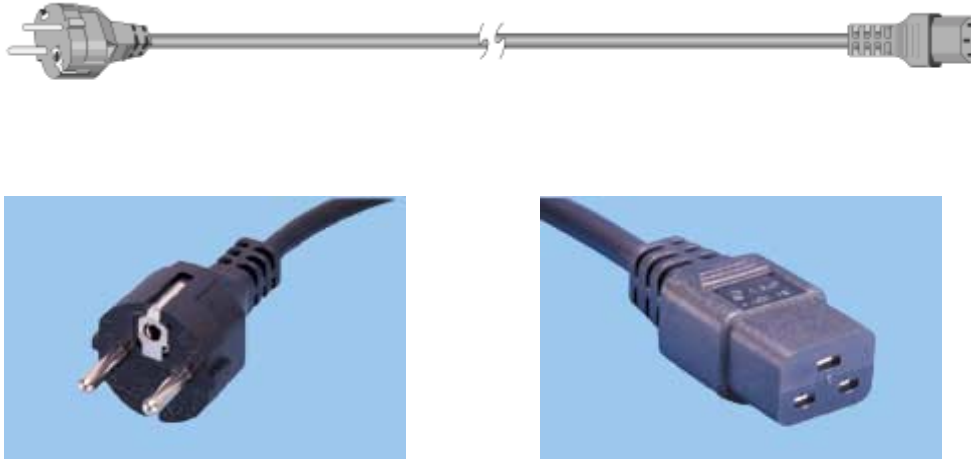


Figure 11

Vendor Name	InterPower Products
Part Number	86235000
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C19
Supply End	Schuko
Current Rating	16A
Voltage Rating	250VAC

Description: Continental European Cordset w/C19 Connector

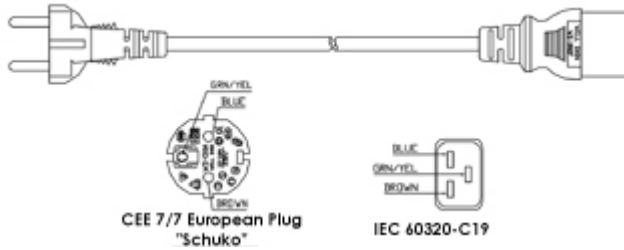


Figure 12

Vendor Name	Quail Electronics
Part Number	8504.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C19
Supply End	Schuko
Current Rating	15A
Voltage Rating	250VAC

4.1.5 Chinese 1800Watt Power Supply Cordsets

Description: Chinese Cordset w/C19 Connector

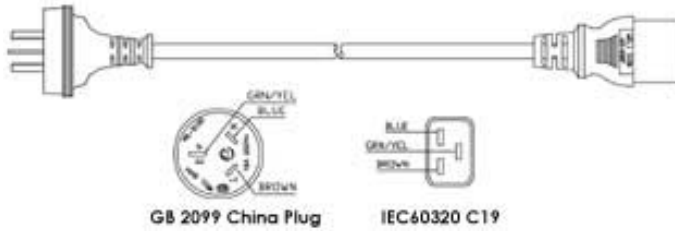


Figure 13

Vendor Name	Quail Electronics
Part Number	8591.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C19
Supply End	GB 2099-1-1996
Current Rating	16A
Voltage Rating	250VAC

4.1.6 United Kingdom 1800Watt Power Supply Cordsets

Description: United Kingdom Cordset w/C19



Figure 14

Vendor Name	InterPower Products
Part Number	86395090
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	U.K. Plug BS 1363
Current Rating	13A
Voltage Rating	250VAC

Description: United Kingdom Cordset w/C19 Connector

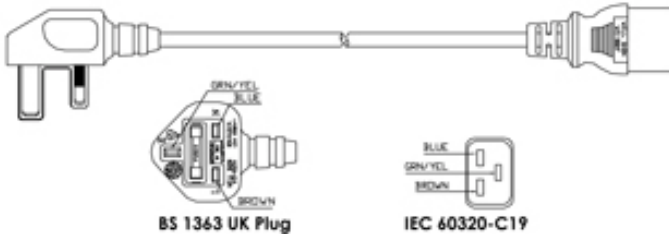


Figure 15

Vendor Name	Quail Electronics
Part Number	9656.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com
Equipment End	IEC 60320 C19
Supply End	U.K. Plug BS 1363
Current Rating	15A
Voltage Rating	250VAC