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USB Connector for Mezzanine Applications
Guidelines
Rev. 1.0

An Interface for USB Peripheral Devices

Definition:
For the purpose of this document, a USB plug shall be defined as any physical topology capable of connecting a “downstream device” to the ”upstream port” of another device, using the defined USB connection.

Features
• A mechanical interface specification only
  ▪ No Device electronics are defined
• Fully conforming with USB 2.0 ‘A’ side connector electrical specifications
• Designed for manufacturability and low cost design
• Device volume is competitive in respect to other devices used in Embedded such as CF and IDE based modules

Design Goals
1. To define an industry standard for embedded: rugged, low cost, small USB interface that enables USB device vendors to penetrate the growing consumer electronics (CE) and embedded host market, in addition to the computing market thus grow the overall USB market
2. To comply with existing electrical USB 2.0 device specifications
3. To be competitive with other existing small form factor device mechanical designs in ruggedness, cost, simplicity manufacturability and usability
4. Through proper device mechanical design, to encourage host-side sockets that are equally simple

Revision History
Rev. 0.9:
- Second revision
Top View

Pins #9 & #10 are blocked

3-6mm recommended mating pin length

Mating connector pinout

Default USB Port

Optional USB Port

Notes:
1. All dimensions are in mm [Inch].
2. General tolerance +/-0.10mm.
3. Insulator Material: UL 94-V0
4. Prior to 2005 the header's keying was such that only pin #9 is blocked.
   To allow for backward compatibility, a plug with both configurations,
   either pins #9/#10 blocked or only pin #9 blocked, will comply.

UNLESS OTHERWISE SPECIFIED ALL DIM:
IN ARE mm

TOLERANCES:
LINEAR

ANGLES:

ROUGHNESS:

SCALE:

NAME: USB SMT Female connector 0.1" spacing

NOTES:

Interface Drawing

DESIGNED: Yossi C. 24.1.05
CHECKED: Amir B.N. 24.1.05
APPROVED: Alan Z. 24.1.05

NO. PART: 94-CN-249-00 OL REV D