A Specification for an Automation Controller Interface
Overview

• Release to Public Domain
• Content
  • Electrical
  • Packet Protocol
  • Command Set
Release to Public Domain

- Approach
  - Construction

  Evolution
  - Predictable
  - Manageable change
  - Keeps products on schedule

- Unfettered communication
  - Removes proprietary restrictions
  - Promotes disclosure
Content

• Changes
  • ACI V4.0
  • Removed ‘HP Restricted’ label
  • Version 4.0.1

• Overview
  • Electrical
  • Packet protocol
  • Command Set
Electrical

- RS-422 Full-duplex serial bus
  - 9600 to 115,200 baud
  - 8,2,n
- Additional sense lines
- Attention control lines
  - Drive Reset
  - Library Attention
- Additional lines either 3.3 or 5V
Packet protocol

- Variable length
  - STX, ETX, and Length fields
- ACK and NAK
- Sequence numbering
- 2 byte checksum
- XON – XOFF flow control
Mandatory Command set

• Informational
  • Get Drive Info – static, incl. primitive
  • Get Drive Status – dynamic
  • Get Error Info – sense data

• Configuration
  • Get/Set Drive Config
  • Reset – ACI port and full drive reset
  • Set Baud Rate

• Cartridge movement
  • Load – Immediate, Thread, Clean, Upgrade
  • Unload – Immediate, Eject

• Testing
  • No-Op
Optional Command Set

• Firmware management
  • Get/Send Firmware Segment
  • Send Firmware Image (old)
• Send SCSI
• SCSI Surrogate
• Get MAM
• Get Buffer Size