



i n v e n t

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