XL7700 Printer Server

PC's or Workstation

ETHERNET

Localtalk

Localtalk

ETHERNET

ETHERNET

Localtalk

Localtalk
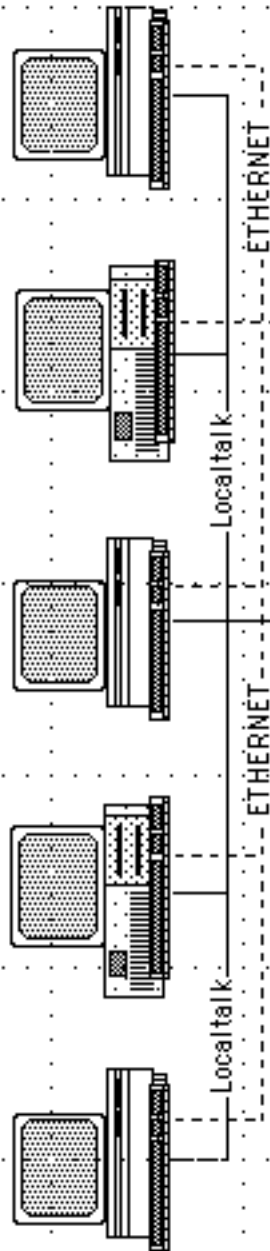
ETHERNET NETWORK

Localtalk NETWORK

Ethernet could be offered as an option. Appletalk might be sufficient for most Postscript users, because of small file size.

Ethernet

Mac IIci or IIcx w/Hard Disk

(IIci has built-in video display circuitry, so no NuBUS display card is needed. Unit would only need monitor when first set up, could then be disconnected.)

RIPServer

Postscript RIP

RIP could be RISC Co-Processor or just accelerated main processor running software RIP.

Storm Technologies or C-Cubed Compander Card

IEEE-488 or SCSI

Large Format Printer
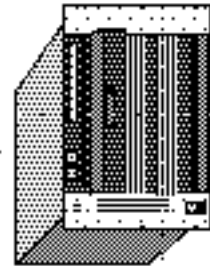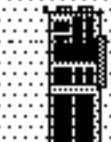
January 4, 1990

To: Distribution
From: Pete Sucy, MacAppLab, EPD, 3-1-EP, MS35209, X60989
Subject: New Product Proposal

I saw the Gen II motherboard yesterday and it struck me while discussing our Postscript problems that perhaps it offered a solution. Perhaps it could provide a solution for all of PPD's printer products.

I suggest developing a Printer Server/Postscript RIP box with the NuBus motherboard. This box would connect to a Localtalk or Ethernet network and Kodak printer products (engines) would attach to the box, possilby up to half a dozen engines per box using the SCSI IF.

It would feature...

- Built-in Localtalk interface, Optional Ethernet NuBus interface card

- Three NuBUS slots.

- Motorola 68302 microprocessor w/ lots of available RAM and ROM

- Printer interfaces - Built-in SCSI, serial interfaces, optional Centronics

- Expandable NuBUS RIP Buffer - 16Mb Nubus card (National Semi)

- Optional SCSI hard disk for spooling

- Compander card would provide Postscript RIP engine and additional 4MB of RAM.

- Postscript firmware licensed from Adobe, Microsoft, Copy Products or other.

- Controls more than one printer engine at once (small, medium, large) via SCSI interface directing requests to proper engine

- Intelligent server software would arbitrate job priorities, spool files, direct files to proper engine

What Needs to be Done...

- Provisions for Localtalk interfacing are already on the board, Pete Stubler of Copy Products has a Localtalk interface alreadt designed for a personal laser printer of theirs, and Dept 47 wrote the Localtalk protocal software.

  Need to follow up here.

- Apple and several third parties provide NuBUS Ethernet boards. Would need to select vendor and develop or procure software for Ethernet interface. Dept 47 is rumored to be developing Ethernet communication software for Copy Products.

- SCSI and serial interfaces are already on the board. Creative Solutions provides a Centronics NuBus card.

- Off the shelf, NuBus memory card is available from National Semi and possibly others. (up to 16Mb per card)

- Investigate using Compander card for Rasterizer and what it would take to convert Postscript rasterizing software to run on it.

- Investigate licensing agreements with Adobe, Microsoft or whomever. Microsoft will be providing Postscript RIP software for Apples' future laserprinters. Copy Products has PS RIP that could be converted.

- Evaluate development task for server software and look at third party alternatives.

Why We Should do It...

- We Need to provide Network capability for all our printers.

- We Need to provide Postscript compatibility for many of our customers.

- We are already developing the motherboard, we just need to redefine it.

- It provides an elegant printing solution for a variety of users.

- User will only need to buy one RIP for all Kodak printers at one location, provides competive price advantage. (Only one license fee?)

- Proves we are the Printer Center of Excellence.

- We should be able to get the PPD organizations to get behind this (with $$$) as it would benefit the whole PPD organization. Laser Lightshow is just one non thermal product looking for a Postscript RIP.

Some hidden benefits...

- Compression could be part of server box.
  - Files could be sent to server, compressed and then returned.
  - Compressed files could be sent to server for expanding and printing, speeding up transfer times.

- Could also be made into a network transceiver with the addition of a NuBUS modem board and software. Would allow transmitting images to remote printers (ColorFAX!!!)

It just seems to make alot of sense in light of where we are and where we want to be with Postscript. Please send me your comments and if there is interest I will set up a meeting to discuss this further.

Distribution list

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