FASTechnologies, Corp.
your drill & rout technology experts

**UltraServer** 

**UltraServer features:** 

supports all PWB industry machines & Protocols **DNC1.3/4** Hitachi DNC3/4

ships fully tested, ready-to-run!

Standard platform Windows-NT, Windows 2000 or Windows XP Pro.

long filenames fully supported

search paths allows redundant fileservers

powerful script language supports computed file paths

The FASTechnologies DNC UltraServer is a turnkey DNC server based on Microsoft Windows NT/2000/XP. The server comes factory configured and tested, ready to use. UltraServer integrates smoothly with networks running Windows, Novell, and (optionally) NFS network protocols.

The UltraServer supports advanced file management strategies. Long filenames present no problem. Compound path support allows multiple drives to be searched in turn, so it's possible to run dual fileservers with one acting as a "hot backup" to eliminate network outages.

UltraServer's scriptable file path processor allows you to intelligently separate your main disk's part program storage, to avoid placing all files into one directory. This userprogrammable feature enables the UltraServer to compute the file path from the part number called up at the CNC machine.

The UltraServer maintains a log of all part programs downloaded, indicating the time, date, filename, and the target machine. The log aids job tracking and process problem diagnosis, by pinpointing drill and router activity.

One Server

Support all machines

For those occasions where a new (or damaged) drilling or routing machine refuses to communicate, UltraServer includes a complete port diagnostics window. The diagnostics can troubleshoot at the file, packet, or protocol byte level, making it easy to trace communications problems.

FASTechnologies has been delivering reliable DNC server products since 1988. Today, over 1200 drilling and routing machines are running on FASTechnologies DNC servers. These include Excellon, Hitachi, Pluritec, ESI-Dynamotion, Klingelnberg, Schmoll, Posalux, ATI and various other machines using a variety of protocols.

# DNC UltraServer

Windows NT/2000/XP Professional based DNC file server

## general

The UltraServer is a connection server program for CNC machines capable of communicating in a variety of protocols. The server's main executable is a full 32-bit Windows NT/2000/XP Professional application, with full multitasking capability for servicing up to thirty-two concurrent file transfers in either direction (uploads and downloads). Its support of these protocols is complete, even to the extent of providing work around for known inconsistencies in several of the protocols.

## protocols

UltraServer completely supports all aspects of the Excellon DNC-1.3 and 1.4, Hitachi DNC-3, Posalux Serial and Sieb & Meyer 1.1 protocols. Other protocols are developed as needed by our customers. This includes the capability of forward and reverse spooling, which allows extremely large part programs to be executed by CNC's with limited RAM.

#### connections

UltraServer may be configured to service eight, sixteen, twenty-four, or thirty-two ports. The baud rates are individually settable for each port, and they may vary from 110 to 38,400 baud. All versions of UltraServer provide the RS-232 interfaces terminated in standard DB-25 connectors. It is suggested (but not required) that customer-supplied short-haul modems be used between the UltraServer and its attached CNC machines, to provide protection against lightning-induced component failures.

# computed paths

UltraServer may be configured to use a FASTechnologies Swap Script to compute the file paths for requested downloads. One popular scheme supported this way is the division of part program files into directories of no more than 1,000 files. In this approach, a requested filename of 12345.DRL could, for example, result in a computed path of \12000\12345.DRL. Many other schemes are possible, limited only by the user's ingenuity. Contact FASTechnologies Tech Support to evaluate UltraServer's applicability to specific directory schemes.

# diagnostics

UltraServer is equipped with port-monitor diagnostics. The diagnostic function may be set up to monitor only packets or all bytes exchanged between the server and the client CNC machine. The diagnostic log may also be recorded to a disk file for later analysis.

