1. CPU card runs an initial bootstrap program from ROM.

2. Boot program obtains address of TFTP server either from PROM or via BOOTP, and runs TFTP to obtain an operating system image (embedded Linux or VxWorks), which is loaded into memory. All communication proceeds over the Ethernet interface on the CPU card.

3. When it boots, the operating system creates a RAM disk. The operating system uses NFS to mount a remote file system. Once the operating system is running, a user can log in and receive a shell prompt for command input.

4. The operating system proceeds to load a set of libraries and functions that comprise the API (VxWorks) or a kernel module that can load libraries on demand (Linux).

5. One of the API functions downloads the *Agere Configuration Image* onto the Port card. The configuration image contains parameters for the APP550 as well as compiled code from FPL and C-NP (i.e., data and instructions for the APP550).

5. Another of the API functions downloads values into the FPGA on the I/O card.

6. The programmer uses the API (from a command or from a program) to interact with the APP550.