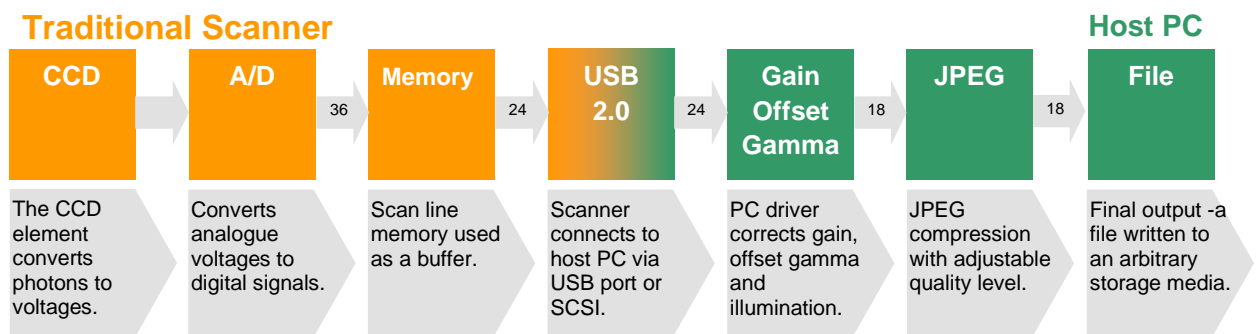


The Scan2Net® Architecture

The question remains: Is there a fundamental difference in architecture between Image Access scanners and traditional scanners? The answer is yes. All our scanners incorporate the Scan2Net® technology, which frees the host PC from all image related and time critical tasks. The scanner's heart is a Pentium based Linux system with 2GByte RAM, more than found in many PCs. This processing power is not consumed by Windows tasks or other unknown programs and drivers but is fully dedicated to the scanner specific imaging tasks. All communication is performed through the standard network connection using TCP/IP protocols.

A traditional scanner relies heavily on the scanner driver which runs inside the PC. The A/D converters may have produced up to 48bits of data but the data is truncated to 24bits before it traverses via the USB or FireWire connection into the PC. After some necessary corrections are performed, including gamma correction, only 18bits of data remains although this is invisible at first glance because it still is coded into the 24bit world.



In a Scan2Net® scanner, all corrections as well as gamma are performed inside the scanner at the full resolution of the camera subsystem, typically 36bits. Only the clean, compressed file is sent to the PC via the network, not only reducing traffic but preserving much more resolution.

