Ucamco announce a revision of the industry standard RS-274X Format Specification

Ucamco announce an updated version of the industry standard RS-274X Format Specification. The RS-274X format itself is unchanged but key areas of the Guide have been expanded or clarified. The goal is to help PCB designers deliver files which their fabricators can process more easily and more securely, thus reducing the risk of delay and error.

Gent, Belgium - December 13, 2010 – Today RS-274X is the de facto standard for PCB image data transfer. Virtually every PCB design system outputs it and every PCB CAM system accepts it. Implementations are thoroughly field-tested and debugged. Its widespread availability allows PCB professionals to exchange image data safely and efficiently. It is also widely used to transfer drill and route data.

The RS-274X format is simple, compact and unequivocal. It is easy to interpret. It describes an image with very high precision. It is complete: one single file completely describes a single PCB layer. Its use of printable 7-bit ASCII characters makes it eminently portable and easy to debug. Unfortunately, in some cases CAD systems generate poorly constructed or simply erroneous RS-274X files, a practice which has led to unjustified criticism of the format.

Ucamco understand the critical importance of data transfer between PCB designer and PCB fabricator. With more than 25 years experience of PCB CAM development they have an excellent overview of potential problems. Their software has processed uncountable files for their customers and their test queues contain thousands of trial files. As custodians of the format they have now set out to update the format guide and help to improve the quality of Gerber files in the field.

Karel Tavernier, Managing Director of Ucamco, comments: "We want to make sure that designers and fabricators get the very best out of RS-274X. The new specification document is clearer and we have cut out some historical dead wood. The RS-274X format itself has not been changed in any way, but we hope that the revised guide will make it clearer and more straightforward to implement. This will help designers and fabricators achieve the most efficient PCB data transfer. From a set of RS-274X files it is entirely possible to import and analyze a complete PCB design automatically, as we have achieved with our Integr8tor software"

Errors in RS-274X files are sometimes due to a misunderstanding of the format. Ucamco knows which misunderstandings are most frequent. The new version of the RS-274X Format explains these areas more clearly.

Sometimes files are not invalid but poorly constructed. Particularly troublesome are painted or stroked SMD pads and copper planes. Poorly constructed files take longer to process, require more manual work and increase the risk of errors. The section Best Practices recommends constructions to make RS-274X files safer and more efficient, and hence fabrication more reliable, faster and cheaper.

Karel Tavernier adds: "The emergence of RS-274X as a standard for image exchange is the result of effort by many individuals who developed outstanding software for RS-274X files. Without their dedication the widespread acceptance of RS-274X could not have been achieved. Ucamco thanks these dedicated individuals."

The RS-274X Format Specification document in pdf format can be downloaded from http://www.ucamco.com/downloads.php

About Ucamco

The Ucamco (former Barco ETS) is a market leader in PCB CAM software and laser photoplotting systems with a global network of sales and support centers. Headquartered in Ghent, Belgium, Ucamco has more than 25 years of continuous experience in developing, supplying and supporting leading-edge photoplotters and front-end tooling solutions for the global PCB industry. For more information please visit www.ucamco.com