Ucamco Software
Installation Requirements

Ucamco Software
April 2020

April 2020

Correspondence regarding this publication can be sent to:

Ucamco NV
Bijenstraat 19,
B-9051 Gent, Belgium

For more information:

Our web site: http://www.ucamco.com

E-mail: info@ucamco.com

About Ucamco
Ucamco (formerly Barco ETS) is a market leader in PCB CAM software, photoplotting and direct imaging systems, with a global network of sales and support centers. Headquartered in Ghent, Belgium, Ucamco has over 25 years of ongoing experience in developing and supporting leading-edge photoplotters and front-end tooling solutions for the global PCB industry. Key to this success is the company's uncompromising pursuit of engineering excellence in all its products. Ucamco also owns the IP rights on the Gerber File Format through its acquisition of Gerber Systems Corp. (1998).

Helpdesk

Europe, Middle East, Africa, Latin Amerika	Asia Pacific	North America
Customer Support for Plotters, Software en Ucamco NV AOI Monday - Friday: 08.00 AM - 6.00 PM MET + 32 9 216 99 00 General support: support@ucamco.com License: license@ucamco.com Java™ HyperTool: hypertool@ucamco.com HyperScript: hyperscript@ucamco.com General information: info@ucamco.com Sales: sales@ucamco.com	Please contact our business partner for your country during support working hours see contacts page	Customer Support for Plotters, Software en Ucamco NV AOI Monday - Friday: 08.00 AM - 6.00 PM Pacific Time Saturday : 10 am to 4 pm Pacific Time +1 949 632 6895 General support: support@ucamco.us License: license@ucamco.us Java™ HyperTool: hypertool@ucamco.us HyperScript: hyperscript@ucamco.us General information: info@ucamco.us

Table of Contents

1 Introduction

1.1 Document Description

This guide is aimed at prospective users and outlines the configurations required to run each software package in the Ucamco catalogue.

Each of the following chapters briefly describes the software and then enumerates all requirements for running it on each of the supported platforms.

1.2 About This Document

The following conventions are used in this document:

Note:	Provides essential extra information.
Tip:	Provides useful extra information.
Example:	Contains examples of file syntax, commands, settings, etc.
Warning:	Contains an important warning.

1.3 Other Available Documentation

Ucamco offers its customers a wide range of documentation on all its software including installation requirements, procedures, release information, detailed task descriptions and info on customer support availability.

If you need more info please mail us at info@ucamco.com

2 Overview

This manual contains the minimum and recommended configurations to run Ucamco software. The following products are handled:

- UcamX
- SmartPlot
- AOI frontends
- Electrical Test Frontends
- FaultStation
- Integr8tor
- SmartPlate

Ucamco uses a license server to control the licensing of its software.
Please read Chapter 10 to find out the different options you have for installing a license server.

3 UcamX

3.1 Product Overview

UCAMX is Ucamco's newest pre-production engineering solution for the electronics manufacturing industry. It is the successor of Ucam. It is developed to provide PCB manufacturing with zero-defect tooling. UCAMX can accept a wide variety of PCB data as well as generate all data and process information for your production equipment.

Product	Description
UCAMX CAM ++	UCAMX CAM++ offers integrated planning, tooling, and testing and optical inspection functions. UCAMX captures layout data, netlist information, customer specifications, mechanical drawings and manufacturing details in a single job database. UCAMX CAM++ also offers security tools such as Netlist Compare, Netlist Analysis and Image Compare.
UCAMX AF+	UCAMX AF+ (AutoFixture) offers a solution for the design of universal fixtures. It calculates the most cost-effective fixture and allows you to split between universal grid and flying probe.
UCAMX ET+	UCAMX ET+ is an open electrical test CAM system that offers above-market standards test point generation and the most complete IPCD356A output. It also provides links to (any combinations of) flying probe, flying grid, universal and dedicated fixture testers.

3.2 Requirements

UCAMX is available for download via our **FTP**-site (ftp.ucamco.com). The following platforms and operating systems are supported:

- ❑ Windows 10
  UcamX is working on Windows Vista / 7 / 8 too but we no longer fix issues that are specific to that OS

- ❑ Linux
  UcamX is working on specific Linux Distros but we no longer fix issues that are specific to that OS. For details please contact us on info@ucamco.com

Note: The PC that you provide to run UCAMX should be dedicated to the use of UCAMX only. We strongly advise you to use a PC configuration from a brand name supplier (Intel based).

Specific requirements for each configuration are discussed below.

3.2.1 Windows

The following are the requirements for installing and running UcamX on a Windows system.

Features	Minimum	Recommended
O/S	Windows 10 - 64bit	
Processor	Dual Core Processor	Intel Core i7 or better
RAM memory	4 GB	8+ GB
Free disk space	500 MB for installing UCAMX	
Display	1920x1080	1920x1080 or more
Network card	Ethernet network card for TCP/IP network environment	
Internet browser [1]	Internet Explorer, Mozilla Firefox or Google Chrome	

(1) A browser is needed to display the Online Help.

Tip: All current CPU's are 64bit. To get the maximum performance from UcamX it is strongly recommended to install a 64bit operating system.

Parallel Processing (PP+)

The following are the requirements for installing and running UCAMX with parallel processing capabilities on a Windows system. These are additional requirements on top of single core UcamX version.

Features	Minimum	Recommended
O/S	Windows 10 - 64bit	
Processor	Dual Core Processor with hyperthreading enabled	Intel Core i7 or better
RAM memory	8 GB	16 GB (4GB per PP)

3.2.2 Linux

UcamX is working on specific Linux Distros but we no longer fix issues that are specific to that OS. For details please contact us on info@ucamco.com

4 SmartPlot

4.1 Product Overview

Ucamco's UcamX Plot Frontends are developed for data-preparation for plotting,

Product	Description
SMARTPLOT	SMARTPLOT allows you to import jobs or layers with aperture definitions, merge layers into films, submit films to the queue, manage the plot process. SMARTPLOT imports all major formats and can be integrated in any environment.
SMARTPLOT SERVER	SMARTPLOT SERVER contains the same functionality as SMARTPLOT but additionally includes a Hotfolder server, which allows you to submit jobs by simply copying them to a predefined directory, the 'Hotfolder'.
UCAMX SMARTPLOT	UCAMX SMARTPLOT allows you to import jobs or layers with aperture definitions, merge layers into films, submit films to the queue, manage the plot process. UCAMX SMARTPLOT also handles layers in older formats.

4.2 Requirements

The following are the requirements for running Ucamco's Plot Frontends.

Features	Minimum	Recommended
O/S	Windows 10 - 64bit	
Processor	Dual Core Processor	Intel Core i7 or better
RAM memory	4 GB	8+ GB
Free disk space	500 MB for installing UCAM	
Display	1920x1080	1920x1080 or more
Network card	Ethernet network card for TCP/IP network environment	
Internet browser [1]	Internet Explorer, Mozilla Firefox or Google Chrome	

5 AOI Frontends

5.1 Product Overview

The UcamX AOI Frontends are dedicated data preparation seats for AOI machines and offer:

- ❑ a 'one-stop' interface that includes a bird's-eye preview;
- ❑ a PCB marker/Outline Editor for non-UCAMX panels;
- ❑ support for multiple polygonal inspection and exclusion zones
- ❑ crosshatch exclusion;
- ❑ multiple machine configurations with simultaneous data preparation and output for multiple DPF layers;
- ❑ a Sequential Buildups module that automatically sends thickness information to the AOI machine.

Product	Description
UCAMX SMARTARGOS	Data preparation seat for an ARGOS machine.
UCAMX SMARTACCUMATCH	Data preparation seat for an ACCUMATCH machine.
UCAMX SMARTSAPPHIRE	Data preparation seat for a SAPPHIRE machine.

5.2 Requirements

Requirements for Ucamco's AOI Frontends are basically the same as for the UcamX CAM Seats.

See also:

Chapter 3.2

6 Electrical Test Frontends

6.1 Product Overview

The Ucamco electrical test frontends are data preparations seats for Electrical Test Systems and offer the following functionality:

- ❑ Netlist generation
- ❑ Netlist Compare and Analysis
- ❑ Testpoint generation
- ❑ Workflow assistance

Frontends for Flying Probe Testers	
Product	**Description**
UCAMX SMARTSPEEDY	Data preparation seat for a SPEEDY electrical test system.
UCAMX SMARTPROBOT	Data preparation seat for a PROBOT electrical test system.
UCAMX SMARTFUJITSU	Data preparation seat for a FUJITSU electrical test system.
Frontends for Fixture-based Testers	
Product	**Description**
UCAMX SMARTGRID	Data preparation seat for a GRID electrical test system.

6.2 Requirements

Requirements for Ucamco's ET Frontends are basically the same as for the UcamX CAM Seats.

See also:

Chapter 3.2

7 FaultStation

7.1 Product Overview

Fault Finding	
Product	**Description**
FAULTSTATION PERSONAL FAULTSTATION ENTERPRISE	FAULTSTATION allows you to visualize jobs as they have been generated by UCAM(X), combined with the fault information coming from your test equipment.

7.2 Requirements

The following are the requirements for installing and running FAULTSTATION on a Windows PC.

Features	Minimum	Recommended
O/S	Windows 10 - 64bit	
Processor	Dual Core Processor	Intel Core i5 or better
RAM memory	4 GB	8 GB
Free disk space	50 MB	
Display	1920x1080	1920x1080 or more

8 Integr8tor

8.1 Product Overview

Integr8tor	
Product	**Description**
INTEGR8TOR SERVER INTEGR8TOR CLIENT	INTEGR8TOR allows you to automate your data input and engineering analysis for quoting, product engineering and DFM.

8.2 Requirements

8.2.1 Integr8tor Server

The following are the requirements for installing and running INTEGR8TOR SERVER on a Windows system.

Features	Minimum	Recommended
O/S	Windows 10 - 64bit Windows 2016 server -64bit	
Processor	Dual Core	Quad-Core + 1 Core / Workflow (*)
RAM memory	4 GB per core	4 GB per core
Display	1920x1080	1920x1080 or more

(*) Integr8tor fully supports high-performing parallel processing by virtue of concurrent workflows, which is a licensed feature. A single workflow already benefits from a multi-core system because several processes are spawned or involved during a workflow execution, however a multi-flow system scales up the throughput many fold.

Note: You need disk space for the Integr8tor Workflow data. Process data can be stored on the server, on a data server or on a network folder. It is advisable to use fast disks and a highspeed network.

8.2.2 Integr8tor Cockpit

The following are the requirements for installing and running INTEGR8TOR COCKPIT on a Windows system.

Features	Minimum	Recommended
O/S	Windows 10 (64 bit)	
Processor	Dual Core	Intel Core i5 or better
RAM memory	2 GB	4 GB
Display	1920x1080	1920x1080 or more

It is required to install the Adobe Air runtime and Acrobat Reader on all systems, whether server or client, on which the Integr8tor Cockpit is installed.

It may be desired to install third party image viewers for particular external image formats, such as dwg, dxf, tiff, a.o, to be viewed by double clicking the relevant file from within the Cockpit.

Adobe Acrobat Reader and Adobe Air can be downloaded free of charge from the Adobe website (http://www.adobe.com)

9 SmartPlate

9.1 Product Overview

Product	Description
SMARTPLATE ENGINE	SmartPlate embeds advanced electrochemical modelling software developed by plating industry specialist ELSYCA into UcamX. The core modelling engine analyses the plating bath geometry and the individual panel layout to predict copper thicknesses across the board.

9.2 Requirements

The following are the requirements for installing and running UcamX and SmartPlate Engine on a Windows system.

Features	Minimum	Recommended
O/S	Windows 10 - 64bit	
Processor	Dual Core Processor	Intel Core i7 or better
RAM memory	4 GB	8+ GB
Free disk space	500 MB (UcamX) + 25MB (SmartPlate Engine)	
Display	1920x1080	1920x1080 or more
Network card	Ethernet network card for TCP/IP network environment	
Internet browser [1]	Internet Explorer, Mozilla Firefox or Google Chrome	

(1) A browser is needed to display the Online Help.

10 License Server

Every Ucamco software installation needs at least one license server. A license server is a workstation with the Flexlm license software installed on it. It grants the different workstations access to the functionality they need at the time they require it.

Note: The license server can be a dedicated workstation or a workstation that runs one or more Ucamco software products.

Ucamco offers a separate License Installation and Upgrade Package to install and setup a license server.

The Flexlm license server software is available for the same hardware platforms and operating systems as the Ucamco application software.

Warning: Virtual machines as license servers are allowed only in combination with a hardware dongle. Please contact your local Ucamco representative for further details.

Ucamco Software Installation Requirements