# **PLUNIFY** EDAxtend for FPGA



## **Overview**

Chip design companies can design faster and better using cloud computing.

- Hardware and Software On Demand
- Shorter Time-To-Market
- Lower IT costs

Plunify's cloud-based Chip Design Platform is secure and easy to use, with no disruption to your current workflow.

Plunify simplifies the complexities of cloud computing and provides an API built specifically for chip design workflows. Using Plunify products, an engineer can easily access cloud resources, scaling up existing compute resources - hardware, software, power, speed with a few button clicks or a simple script.

By maximizing the parallelism and flexibility of cloud computing, Plunify enables users to perform design tasks at a fraction of the traditional time and IT overheads required.

# **Product Features**

#### **Cloud computing capabilities**

- Run multiple FPGA synthesis and place-&-route in parallel
- Scale up and down number of servers, tools instantly
- Always-on access to older design tool versions
- Securely transmit and receive design data
- Automatically track and monitor tens, hundreds of design tasks at a time

#### Access to extensive range of cloud servers

- 613MB 68.4 GB memory
- 1 8 virtual CPU cores
- Low High I/O speeds
- More available upon request

#### **Compute resource management**

- Approve or reject builds
- Keep track of cloud usage by users
- Benchmark designs run on Plunify platform

## **Benefits of EDAxtend for FPGA**

- Faster runtimes
- No queuing time for builds to start running on available compute resources
- Quick turnaround times for multiple builds greatly parallelizes design flow
- Greater freedom to optimize designs and explore design configurations
- Improved design analysis methodology to shorten the design cycle
- Pay only for what you use

#### Automated FPGA design analysis

- View critical paths and other design bottlenecks on more accessible platforms e.g. web, mobile devices
- Compare multiple builds to find
  - Commonalities between passing builds
  - What to avoid in failing builds
- Get suggestions on next steps based on the analysis of current builds



#### Industry-standard security technologies

- 256-bit AES encryption
- SSL-encrypted transfers
- Asymmetric key authentication
- Amazon Web Services infrastructure
- http://aws.amazon.com/
- https://aws.amazon.com/security/



#### User interface

- Web browser interface to quickly submit FPGA designs and view results
  - ▶ No software downloads, no installation required
  - Access from any mobile device
  - Supports legacy design tool versions
- Command-line Tcl interface to define advanced FPGA project settings
  - Downloadable software client that works with existing FPGA software
  - Tcl API integrates readily with your existing scripts



# **Product Options**

Product Name	Product Description
Plunify Lite	Plunify cloud platform with 1,250 computing credits
Plunify Value	Plunify cloud platform with 3,350 computing credits
Plunify Supreme	Plunify cloud platform with 7,150 computing credits

Note: Customization to use in-house machine farm as the computing resource is available as a consulting service.

## System Requirements for Command-line Tcl interface

- Windows® (32-, 64-bit):
  - ▶ Windows XP SP3, Vista Professional SP1, 7 Professional
- Linux (32-, 64-bit):
  - ▶ Red Hat Enterprise 4.0, 5.0, Fedora Core 8 onwards
  - SUSE Linux Enterprise 11
  - CentOS 4.0, 5.0
  - ▶ Ubuntu 8.04 onwards
- Java Runtime Environment (JRE 1.6 and above)

# Supported FPGA Tools and OS

- Altera Quartus-II (9.1 onwards)
- Xilinx ISE Logic Edition (10.1 onwards)
- Xilinx Vivado (2012.1 onwards)

### **About Plunify**

Plunify helps chip design companies access scalable cloud resources securely and efficiently. Our cloud automation platform is built upon Amazon Web Services and Plunify is proud to be an Amazon Web Services Solutions Partner. Plunify is based in Singapore and in the United States.

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