

Internal Use Only



Sigrity X Token Product Line

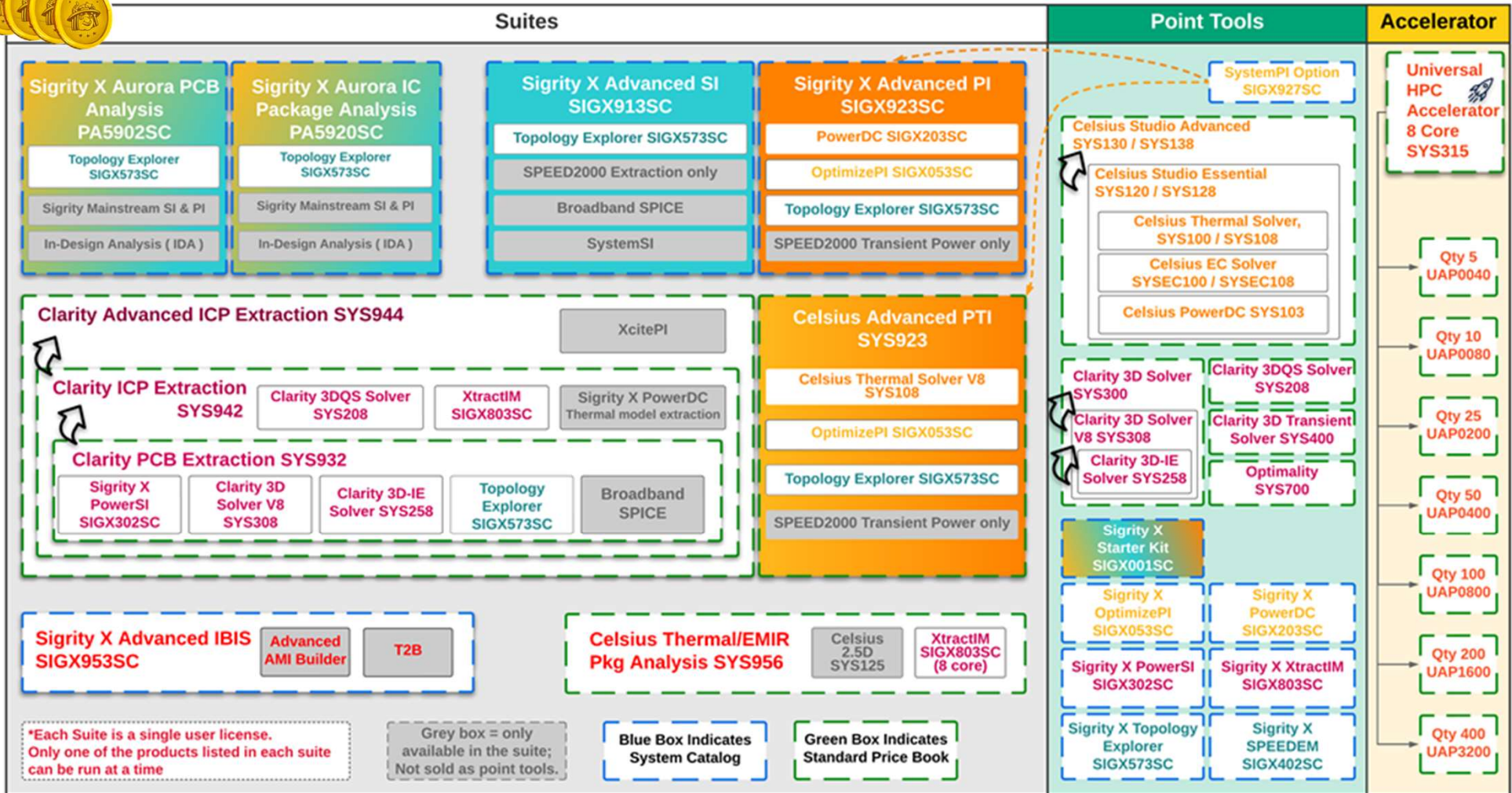
Enables Signal/Power Integrity Solution to be sold with greater flexibility

Brad Griffin, Product Management Group Director

August 2024

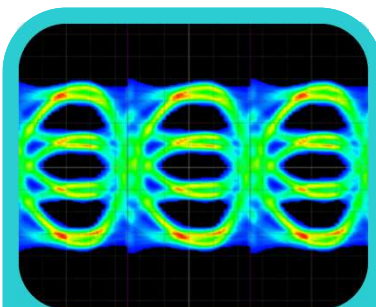
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The Sigrity / Clarity / Celsius Product Line H2 2024



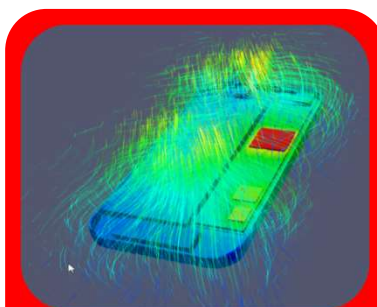
Sigrity X /Clarity /Celsius Bundles 2H 2021

New



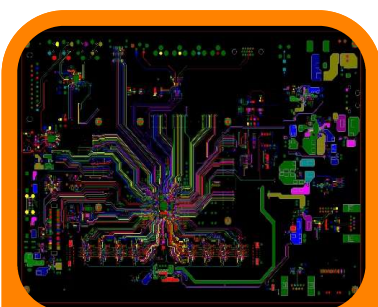
**Sigrity Advanced SI II
SIGR913**

- ✓ Broadband SPICE
- ✓ SPEED2000
(Extraction Only)
- ✓ SystemSI II – PBA / SLA
- ✓ Topology Explorer



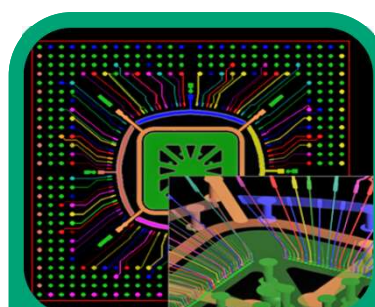
**Celsius Advanced PTI
SYS923**

- ✓ OptimizePI II
- ✓ Celsius V8
- ✓ SPEED2000
(Transient Power Only)
- ✓ Topology Explorer



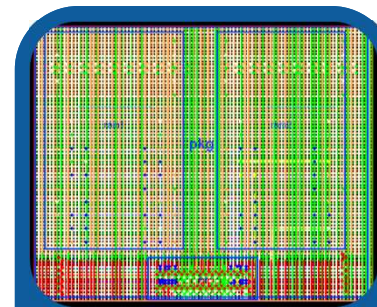
**Clarity PCB Extraction
SYS932**

- ✓ Broadband SPICE
- ✓ PowerSI II
- ✓ Clarity V8
- ✓ Topology Explorer



**Clarity IC Pkg.
Extraction SYS942**

- ✓ Broadband SPICE
- ✓ PowerDC
(Thermal Model
Extraction Only)
- ✓ PowerSI II
- ✓ Clarity V8
- ✓ XtractIM II
- ✓ Topology Explorer



**Clarity Advanced ICP
Extraction SYS944**

- ✓ Broadband SPICE
- ✓ PowerSI II
- ✓ Clarity V8
- ✓ XtractIM II
- ✓ Topology Explorer
- ✓ PowerDC
(Thermal Model
Extraction)
- ✓ XcitePI

Note: Each Suite is a single user license. Only one of the products listed in each Suite can be run at a time

Sigrity X: Why tokens and why now?

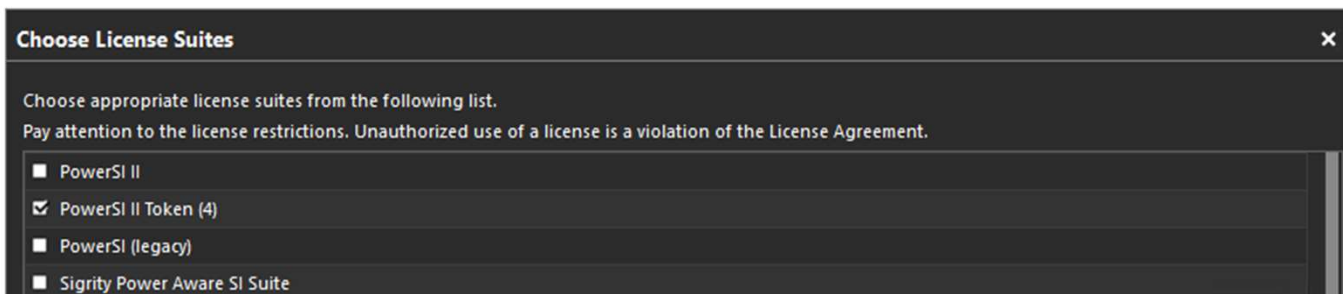
Background and Motivation

- Sigrity is a mature product line - acquired by Cadence in 2012
 - The product line covers a wide range of signal, power, thermal, and EMC simulation technology
- Sigrity X tokens can:
 - Make it easy to explore the tool set outside of normal workflows
 - When licenses are not in use, tokens make it easy to evaluate tools not currently part of a standard workflow
 - Make engineers more efficient as they take on different tasks
 - The same token license are used when running signal integrity tools as when running power integrity tools
 - Make it easy to onboard new engineers
 - Simply order more tokens giving the new engineer the flexibility to run whatever tools are needed to help the design team
 - Provide flexibility for peak simulation requirements
 - One project may require more power integrity simulations, and another project may require more signal integrity – tokens will provide licenses for either situation



How Sigrity X Tokens Work

- Tools have a defined token count to check out ... examples:
 - PowerSI – 4 tokens
 - Advanced SI – 6 tokens
 - XtractIM - 6 tokens
 - XcitePI – 8 tokens
 - Note: Tokens are returned to the license pool upon closing the tool making them reusable
- Sigrity X tokens – only valid for Sigrity X, Clarity V8, and Celsius V8 technology
 - Not for other Clarity, Celsius, Optimality, or accelerators
 - Clarity V8 will require one Clarity enabler token
 - The remaining five tokens will be Sigrity X tokens
 - Celsius V8 will require one Celsius enabler token
 - The remaining five tokens will be Sigrity X tokens
- Tokens can be mixed with standard licenses: user is given a choice to check out tokens or regular license
 - CAD managers have the flexibility to assign either standard licenses or tokens to individual users
 - Note: Tokens **cannot be stacked** to add cores, but standard licenses can
 - Token users must use accelerator licenses (SYS315 / UAPxxxx) to add cores



Details of the Token Licensing

- Each Sigrity/Clarity/Celsius tool will continue to support their existing license strings, but when no license string is available, the tool will check for token availability and check out a specific number of tokens in place of checking out the license string.
- Clarity/Celsius product will require one special enabler token along with the Sigrity X tokens.
- The table below shows the equivalent Ala Carte product and number of tokens
- Token licenses require Sigrity 2023.1 tool version. **Not backward compatible.** SPB23.1 is needed to run in Allegro and APD for Aurora and for TopXP to work with the Tokens

Part #	Product Name	Required Tokens
PA5902	Sigrity Aurora PCB Analysis	2
PA5920	Sigrity Aurora IC Package Analysis	4
SIGR001	Sigrity Starter Kit	2
SIGR011	Sigrity Broadband SPICE	2
SIGR021	Sigrity Transistor to Behavioral Modeling (T2B)	2
SIGR053	Sigrity OptimizePI II	4
SYS103	Celsius PowerDC	4
SIGR302	Sigrity PowerSI II	4
SIGR402	Sigrity SPEEDEM	2
SIGR404	Sigrity ERC	2
SIGR803	Sigrity XtractIM II	6
SIGR913	Sigrity Advanced SI II	6
SYS923 + SIGR927	Celsius Advanced PTI + Sigrity Advanced PI II SystemPI Option	8
SIGR550	Advanced AMI Builder	8
SIGR776	XcitePI	8
SYS108	Celsius Thermal Solver V8	5 + 1
SYS308	Clarity 3D Solver V8	5 + 1

Seeding Clarity / Celsius with Sigrity X tokens

- One Clarity enabler token required to run Clarity V8 (plus 5 Sigrity X tokens)
- One Celsius enabler token required to run Celsius V8 (plus 5 Sigrity X tokens)



Token List Requirements effective 2024.0 Release

- License Strings: (1) SigrX_Token
- Marketing Requirements

SIGR031 Translator can run whenever a single token exists, no license check-out needed

Part #	Product Name	Tokens
SIGR031	Sigrity CAD Design / Data Translators	1
PA5902	Sigrity Aurora PCB Analysis	2
PA5920	Sigrity Aurora IC Package Analysis	4
SIGR001	Sigrity Starter Kit	2
SIGR011	Sigrity Broadband SPICE	2
SIGR021	Sigrity Transistor to Behavioral Modeling (T2B)	2
SIGR053	Sigrity OptimizePI II	4
SYS103	Celsius PowerDC	4
SIGR302	Sigrity PowerSI II	4
SIGR402	Sigrity SPEEDEM	2
SIGR404	Sigrity ERC	2
SIGR803	Sigrity XtractIM II	6
SIGR913	Sigrity Advanced SI II	6
SIGR927	Sigrity SystemPI Option	6
SIGR580	Advanced AMI Builder	8
SIGR706	XcitePI Simulation	8
SIGR776	XcitePI Extraction	8
SYS108	Celsius Thermal Solver V8	5 + 1
SYS208	Clarity 3DQS Solver V8	5 + 1
SYS308	Clarity 3D Solver V8	5 + 1



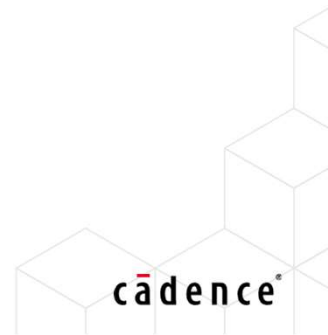
Summary of the New Products Requested in the CPM System

Part Number / Product Name	Price book Type	Comments
SIGRXT06SC – Sigrity X Token Pack	SQW Exception for System Pricebook	<ul style="list-style-type: none">License Feature: SigrX_Token (Qty 6)Product Mapping follows SIGR001
SYS1T01 – Celsius Enabler Token	SQW Exception for System Pricebook	<ul style="list-style-type: none">License feature: CelsiusE_Token (Qty 1)Product Mapping follows SYS100
SYS3T01 – Clarity Enabler Token	SQW Exception for System Pricebook	<ul style="list-style-type: none">License feature: ClarityE_Token (Qty 1)Product Mapping follows SYS300



No tokens planned yet for

- Celsius EC
- Optimality





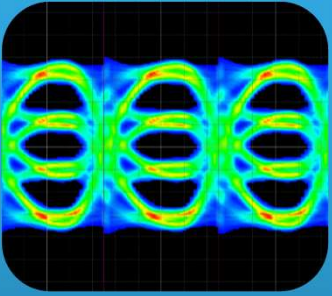
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New Bundle Transition

Power-aware SI
Serial Link SI



Advanced SI
Sigr912

- Broadband SPICE
- SPEED2K (Extraction Only)
- SystemSI – PBA / SLA
- Topology Explorer

PI



Advanced PI
Sigr922

- OptimizePI
- PowerDC
- SPEED2K (Transient Power Only)
- Topology Explorer

PCB Extraction



PCB Extraction
Sigr932

- Broadband SPICE
- PowerSI
- 3D-EM
- Topology Explorer

Pkg Assessment &
Model Extraction



IC Pkg. Extraction
Sigr942

- Broadband SPICE
- PowerSI
- 3D-EM
- XtractIM
- PowerDC (Thermal Model Extraction Only)
- Topology Explorer

