

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

SEMICONDUCTOR DESIGN
TECHNOLOGIES, LLC,

Plaintiff,

v.

CADENCE DESIGN SYSTEMS, INC.,

Defendant.

Case No. 3:23-cv-01001-RFL

Judge: Honorable Rita F. Lin

JURY TRIAL DEMANDED

**DEFENDANT CADENCE DESIGN SYSTEMS, INC.’S
PRELIMINARY PROPOSED CLAIM CONSTRUCTIONS AND
PRELIMINARY IDENTIFICATION OF EVIDENCE**

Pursuant to Patent Local Rule 4-2, Defendant Cadence Design Systems, Inc. (“Cadence”) hereby proposes the following preliminary claim constructions and provides the following preliminary identification of evidence for claim terms proposed for construction found in U.S. Patent Nos. 7,603,636 (“the ’636 patent”) and 7,971,167 (“the ’167 patent”).

Defendant received Plaintiff Semiconductor Design Technologies, LLC’s (“SDT”) Disclosure of Asserted Claims and Initial Infringement Contentions (“Infringement Contentions”) on September 14, 2023. Consequently, Defendant’s investigation is ongoing and discovery is in its early stages. Accordingly, Defendant bases these constructions upon its current knowledge, understanding, and belief as to the facts and information available as of this date. As Defendant has not yet completed its investigation, collection of information, or discovery relating to this action, it expressly reserves the right to supplement, amend, and/or otherwise modify its preliminary claim constructions and preliminary identification of extrinsic evidence, including arguing that one or more of the proposed terms do not require construction,

including to the extent SDT provides any proposed terms for claim construction, amends or supplements its infringement allegations, and/or contentions.

One or more parties have previously produced documents supporting Defendant's proposed claim constructions, bearing Bates numbers CADENCE_PA_0002652-2684; CADENCE_PA_0008254-8296; SDT00000045-364; and SDT00000381-596. Additional evidence disclosed by Defendant is being produced concurrently with the service of this paper and bears the Bates numbers: CDNS0304224-0304276.

Defendant expressly reserves the right to cite as evidence any information from any of the prosecution histories of the '636 patent, '167 patent, and any related patents in the family.

Defendant expressly reserves the right to revise, amend, or supplement its preliminary proposed constructions set forth in Exhibit A at any time, including the right to offer separate constructions for claim terms that are construed as a phrase. Defendant also expressly reserves the right to propose claim constructions for any terms proposed by SDT.

Defendant reserves the right to identify additional extrinsic evidence pursuant to the agreed-upon scheduling order, including but not limited to dictionary definitions, citations to learned treatises and prior art, and testimony of percipient and expert witnesses at least at the time of filing the Joint Claim Construction and Prehearing Statement or in rebuttal to any extrinsic evidence that SDT may offer to support its proposed claim constructions. By identifying extrinsic evidence, Defendant does not necessarily concede that extrinsic evidence is necessary to construe the claim terms at issue.

Defendant also expressly reserves the right to rely on extrinsic evidence that SDT relies upon. In addition to the extrinsic evidence identified herein and as set forth in Exhibit A, Defendant may rely upon one or more experts, including Dr. Gabriel Robins, to testify or provide

a sworn declaration regarding the proposed constructions or to address disputes or constructions raised by SDT. Such testimony could include, among other things, an explanation of the meaning of those terms in the context of the subject matter disclosed in the '636, '167 patents and related prosecution histories, a description of the state of the technology relating to the alleged invention claimed in the '636, '167 patents, how a person of ordinary skill in the art would interpret the identified claim terms or phrases at the time the application for the '636 and '167 patents were filed, and an explanation as to why certain terms or phrases are indefinite. Dr. Robins may also address any evidence that is offered by SDT on any of the disputed terms.

In particular, expert witness testimony may be used by Defendant in connection with its claim construction briefing and/or at the claim construction hearing including, but not limited to, testimony concerning the meaning of the claim terms identified in Exhibit A, indefiniteness of certain claim terms, and the understanding of the intrinsic and extrinsic evidence from the perspective of a person of ordinary skill in the art at the time of the alleged invention.

Finally, nothing stated herein shall be treated as an admission or suggestion that any of the Accused Instrumentalities meet any limitation of any Asserted Claim. Defendant denies that it infringes any and all claims of the Patents-in-Suit as set forth in the Complaint.

Respectfully submitted,

Dated: December 4, 2023

By /s/ Harper Batts

Harper Batts (SBN 242603)
hbatts@sheppardmullin.com
Christopher Ponder (SBN 296546)
cponder@sheppardmullin.com
Jeffrey Liang (SBN 281429)
jliang@sheppardmullin.com
SHEPPARD, MULLIN,
RICHTER & HAMPTON LLP
1540 El Camino Real, Suite 120
Menlo Park, CA 94025
Tel.: 650.815.2600
Fax: 650.815.2601

Ericka J. Schulz (SBN 246667)
eschulz@sheppardmullin.com
James Young Hurt (SBN 312390)
jhurt@sheppardmullin.com
SHEPPARD, MULLIN,
RICHTER & HAMPTON LLP
12275 El Camino Real, Suite 100
San Diego, California 92130
Tel.: (858) 720-8900
Fax: (858) 509-3691

*Attorneys for Defendant
Cadence Design Systems, Inc.*

CERTIFICATE OF SERVICE

I hereby certify that on December 4, 2023, a true and correct copy of the foregoing
DEFENDANT’S PRELIMINARY PROPOSED CLAIM CONSTRUCTIONS AND
PRELIMINARY IDENTIFICATION OF EVIDENCE was served on all counsel of record in this
case by electronic mail.

Counsel for Plaintiff Semiconductor
Design Technologies, LLC

Via Email:

David Alberti
Hong Lin
Robert Xie
Russell Tonkovich
Sal Lim
Robert Mattson
Robert Kramer
James Barabas
**KRAMER ALBERTI LIM &
TONKOVICH LLP**
577 Airport Blvd, Suite 250
Burlingame, CA 94010

dalberti@krameralberti.com
hlin@krameralberti.com
rxie@krameralberti.com
rtonkovich@krameralberti.com
slim@krameralberti.com
rmattson@krameralberti.com
rkramer@krameralberti.com
jbarabas@krameralberti.com
krameralberti-semiconductordesign-
cadence@krameralberti.com

/s/ James Young Hurt

James Young Hurt

EXHIBIT A

Semiconductor Design Technologies, LLC v. Cadence Design Systems, Inc. (3:23-cv-01001-RFL)
Defendant's Preliminary Proposed Constructions and Preliminary Identification of Evidence

EXHIBIT A

Defendant's Preliminary Proposed Constructions and Preliminary Identification of Evidence

U.S. Patent No. 7,603,636 (the '636 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
1, 7, 8, 14	"graphically editing"	"editing a visual expression, as opposed to editing text"	'636 patent: Abstract; Figures 2, 4, 5, 6, 7, 10; 3:64-65, 4:39-44, 6:8-10, 6:14-19, 6:60-62, 6:65-7:2, 7:51-60, 8:4-16, 8:16-20, 8:21-29, 8:30-36, 8:37-41, 9:4-12, 9:42-46, 9:47-67, 10:7-35, 12:18-26; 12:62-13:10; Claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by Semiconductor Design Technologies, LLC ("SDT"). SDT's Opposition to Motion to Dismiss First Amended Complaint (Dkt. No. 46), 3, 8, 13 Dictionary definitions at: CDNS0304274-0304276 ("graphically"); CDNS0304271-0304273 ("graphically") U.S. Patent No. 4,922,432 ("Kobayashi") CADENCE_PA_0002652-0002684: Abstract; Figures 1a-1c, 2, 3, 5, 7, 8, 9, 10; 2:5-63, 3:1-45, 3:50-59, 4:5-34, 4:35-46, 4:56-5:12, 5:20-22, 5:49-68, 6:1-54, 6:56-7:3, 7:5-58, 8:23-26, 8:31-33, 9:8-11, 9:66-10:1, 12:37-13:54 JP 1-309185 CDNS0304247-0304269: Figures 1a-1c, 2, 3, 5, 7, 8, 9, 10; 614-621, 623-625

Semiconductor Design Technologies, LLC v. Cadence Design Systems, Inc. (3:23-cv-01001-RFL)
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U.S. Patent No. 7,603,636 (the '636 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
			Certified English Translation of JP 1-309185 CDNS0304224-0304246: Figures 1a-1c, 2, 3, 5, 7, 8, 9, 10; 614-615 ("The CAD system and method of the present invention make it possible for a user to use ... and from the flowchart, will generate a net list describing the interconnection conditions of the selected hardware elements and each element."), 625 ("4. BRIEF DESCRIPTION OF THE DRAWINGS Figure 1a shows a representation of the design at the functional level for a portion of a desired circuit shown in flowchart format. ... Figure 15 is a block diagram corresponding to Figure 14 after further optimization."), 615 ("Figures 1a, 1b, and 1c show three different levels representing an integrated circuit design. ... Figure 1b shows the structural or logical representation level of an integrated circuit."), 615-616 ("As noted earlier, integrated circuit design at the structural level ... in order to obtain the hardware descriptions."), 616 ("The flow of the overall system used in the present invention is shown in Figure 2. ... and routing tool 16 in order to generate mask data 18 for use in the geometric layout."), 616 ("Referring to Figure 3, KBSC system 10 includes program 20 that may be called EDSIM. ... and will further generate a net list describing all of the design information."), 616 ("Macro library 23 includes macros that define the various operations embodied in the flowchart."), 617 ("The KBSC system may be operated by a suitably programmed general purpose digital computer. ... The CPU generates flowcharts and performs automatic synchronization of simulations and designs."), 617-618 ("The example flowchart shown in Figure 5 may be considered as a portion of a large system ... These blocks may be prepared in order to select elements from the element library to make an element list."), 618 ("Creating and verifying flowcharts is the first stage of the VLSI design methodology. ... This intermediate file may be used by PSCS program 30 to generate a net list."), 618-619 ("Flowchart editor 21 is a software module that may be used to display, create, and edit flowcharts. ... By displaying the flowchart on the display screen during the simulation, designers can simultaneously design and validate the flowchart."), 619 ("This selection may be made based on the description of the functions within the flowchart, and

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U.S. Patent No. 7,603,636 (the '636 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
			may be realized by the macros assigned to each operation displayed in the flowchart.”), 619 (“It is necessary to have conformity between the functions in the flowchart and the elements from the element library in order to design the VLSI system based on the description of the flowchart during utilization by the user.”), 620 (“The first stage of element list creation is conversion to a structure that may be utilized by the element selector described in the flowchart.”), 621 (“The PSCS uses a state-to-state transition from an intermediate list of display formats of the flowchart, such as a state list, to generate the net list.”), 623-624 (“EXAMPLE OF THE DESIGN OF A CONTROLLER FOR USE WITH A SOFT DRINK VENDING MACHINE The following example shows how the above-noted aspects of the present invention may be used below ... The generation of the blocks shown in the figure by PSCS program 30 is based on Rule 1 and Rule 2 of the example rules that have already been described.”)
1, 7, 8, 14	“property”	“plain text that defines operations intended and expected in design data to be verified”	'636 patent: Figures 2, 5, 6, 10; 1:20-30, 1:55-57, 1:60-63, 2:24-30, 2:31-38, 3:23-28; Claims 1, 3, 4, 5, 7, 8, 10, 11, 12, 14 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT. SDT's Opposition to Motion to Dismiss First Amended Complaint (Dkt. No. 46), 5, 6, 9, 15, 16

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U.S. Patent No. 7,603,636 (the '636 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
1, 7, 8, 14	"a specification of the semiconductor integrated circuit"	"requirements of what the semiconductor integrated circuit will be designed to do"	'636 patent: Abstract; Figures 2, 4, 6, 7, 10, 11; 1:20-25, 1:33-40, 1:41-45, 1:46-54, 3:43-53, 3:54-60, 4:4-11, 4:12-19, 4:39-44, 7:51-60, 8:4-20, 8:30-36, 9:4-12, 9:47-52, 11:52-58, 12:18-26, 12:50-61, 12:62-13:10; Claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT. SDT's Opposition to Motion to Dismiss First Amended Complaint (Dkt. No. 46), 8, 11, 15, 16 U.S. Patent No. 4,922,432 ("Kobayashi") CADENCE_PA_0002652-0002684: Abstract, Figures 1a-1c, 2, 3, 5, 7, 8, 9, 10; 2:21-49, 4:35-46 JP 1-309185 CDNS0304247-0304269: Figures 1a-1c, 2, 3, 5, 7, 8, 9, 10; 615-616 Certified English Translation of JP 1-309185 CDNS0304224-0304246: Figures 1a-1c, 2, 3, 5, 7, 8, 9, 10; 615 ("The functional specifications of the desired ASIC described above may be determined in a suitable manner ... such as the detailed chip-level mask data required to manufacture chip-format ASICs."), 616 ("The flow of the overall system used in the present invention is shown in Figure 2. ... This net list can be used as the input into an existing VLSI layout and routing tool 16 in order to generate mask data 18 for use in the geometric layout.")

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U.S. Patent No. 7,603,636 (the '636 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
1, 7	"specification inputting unit that generates design data or specifications and a document for confirming a specification of the semiconductor integrated circuit"	Indefinite; alternatively, "specification inputting unit that generates design data OR (specifications AND a (document for confirming a specification of the semiconductor integrated circuit))" ¹	'636 patent: Figures 2, 5, 6, 7, 10; 4:48-53, 8:21-29, 8:30-36, 12:15-26; Claims 1, 2, 3, 4, 7 William Strunk, Jr. & E.B. White, <i>The Elements of Style</i> 36 (4th ed. 2000) ("[T]he position of words in a sentence is the principle means for showing their relationship," and "[t]he writer must, therefore, bring together the words and groups of words that are related in thought and keep apart those that are not so related."). Chicago Manual of Style (15th edition, 2006) § 5.167 ("5.167 Placement. A prepositional phrase with an adverbial or adjectival function should be as close as possible to the word it modifies to avoid awkwardness, ambiguity, or unintended meanings."). Black's Law Dictionary (8th ed. 2004), rule of the last antecedent. ("An interpretative principle by which a court determines that qualifying words or phrases modify the words or phrases immediately preceding them and not words or phrases more remote, unless the extension is necessary from the context or the spirit of the entire writing. ... Also termed <i>doctrine of the last antecedent</i>; <i>doctrine of the last preceding antecedent</i>."). Reading Law: The Interpretation of Legal Texts (2012), pg. 328: Nearest-Reasonable-Referent Canon ("The doctrine that when the syntax in a legal instrument involves something other than a parallel series of nouns or verbs, a prepositive or postpositive modifier normally applies only to the nearest reasonable referent.").

¹ Defendant uses parentheses to show groupings with respect to the conjunctive, disjunctive, and prepositional phrases. Defendant's alternative construction has the prepositional phrase, i.e. "for confirming a specification of the semiconductor integrated circuit," modify the nearest referent, i.e. "a document," and the conjunctive AND taking priority over the disjunctive OR.

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U.S. Patent No. 7,603,636 (the '636 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
			Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would not have understood the meaning and scope of this term with reasonable certainty. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT.
1, 7	"a property generating unit"	No construction needed because "property" is being separately proposed for construction	'636 patent: Figures 2, 5, 6, 10; 1:20-30, 1:55-57, 1:60-63, 2:24-30, 2:31-38, 3:23-28; Claims 1, 3, 4, 5, 7, 8, 10, 11, 12, 14 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT.
8, 14	"a property generating step"	No construction needed because "property" is being separately proposed for construction	'636 patent: Figures 2, 5, 6, 10; 1:20-30, 1:55-57, 1:60-63, 2:24-30, 2:31-38, 3:23-28; Claims 1, 3, 4, 5, 7, 8, 10, 11, 12, 14 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT.

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U.S. Patent No. 7,971,167 (the ‘167 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant’s Preliminary Proposed Construction	Defendant’s Preliminary Identification of Evidence
1, 2, 3, 4	“block”	“a sequence of code surrounded by matching delimiters, which for the C language is curly braces (‘ {} ’)”; to the extent SDT proposes an alternative construction, indefinite	’167 patent: Figs. 2-4; 1:9-12, 3:25-26, 3:50-51, 4:26-49, 3:37-42, 4:1-20; Claims 1, 3 Prosecution history of the ’167 patent (hereinafter “’167 FH”):2 SDT00000454-467, SDT00000488 Machine translation of JP2008204111A: CADENCE_PA_0008254-8275 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT. U.S. Patent No. 7,370,293 (“Yamagata”) CADENCE_PA_0008276-8296: 7:11-22, 6:26-32
1, 3	“motion level”	“behavioral level”; to the extent SDT proposes an alternative construction, indefinite	’167 patent: Figs. 2-4; 1:40-45, 2:3-8, 2:14-20, 2:25-31, 3:25-26, 3:37-42, 3:50-51, 4:26-29, 5:6-9, 1:9-12, 4:1-20; Claims 1-4 ’167 FH:³ SDT00000454-467, SDT00000488 Machine translation of JP2008204111A: CADENCE_PA_0008254-8275 Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic

² Including the cited prior art references contained therein.

³ Including the cited prior art references contained therein.

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Claim No(s).	Claim Term/Phrase	Defendant’s Preliminary Proposed Construction	Defendant’s Preliminary Identification of Evidence
			evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT. SDT’s Opposition to Motion to Dismiss First Amended Complaint (Dkt. No. 46), 4 U.S. Patent No. 7,370,293 (“Yamagata”) CADENCE_PA_0008276-8296: 7:11-22, 6:26-32
1, 3	“recognize a concept including register and clock synchronism particular to the hardware”	Indefinite	Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would not have understood the meaning and scope of this term with reasonable certainty. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT.
1, 3	“a latency in each block representing an operation in a predetermined unit in the behavioral description”	No construction needed because “each block representing an operation in a predetermined unit in the behavioral description” will be	’167 patent: Figs. 2-4; 1:9-12, 3:25-26, 3:50-51, 4:26-49, 3:37-42, 4:1-20, 1:48-62, 2:27-36, 2:52-67, 3:39-5:3; Claims 1, 3 ’167 FH:⁴ SDT00000454-467, SDT00000488 Machine translation of JP2008204111A: CADENCE_PA_0008254-8275

⁴ Including the cited prior art references contained therein.

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U.S. Patent No. 7,971,167 (the '167 Patent)			
Claim No(s).	Claim Term/Phrase	Defendant's Preliminary Proposed Construction	Defendant's Preliminary Identification of Evidence
		addressed as part of Defendant's proposed construction for "block," as explained in Defendant's preliminary invalidity contentions	Defendant may rely on the expert testimony of Dr. Gabriel Robins, as to how one of ordinary skill in the art at the time of the invention, having reviewed the relevant intrinsic and extrinsic evidence would have understood the meaning and scope of this term. In addition, Dr. Robins may also address any evidence on the construction of this term that is offered by SDT. U.S. Patent No. 7,370,293 ("Yamagata") CADENCE_PA_0008276-8296: 7:11-22, 6:26-32