

Exhibit C: Supplemental Claim Chart for U.S. Patent 10,873,753

U.S. Patent No. 10,873,753

This claim chart is based on publicly available literature, the source code¹ Defendants have made available, and the documents currently produced by Defendants (AMD-CV-0000001–AMD-CV-0007222). Plaintiffs Concurrent Ventures, LLC and XtreamEdge, Inc. (“Plaintiffs” or “CV”) reserve the right to supplement and/or amend their positions based on discovery from Defendants Advanced Micro Devices, Inc. and Pensando Systems, Inc. (“AMD Pensando” or “Defendants”), including technical documentation such as schematics and datasheets, and source code. Plaintiffs reserve the right to amend these contentions for good cause with leave of the Court.

Defendants infringed and continue to infringe U.S. Patent No. 10,873,753 (the “’753 patent”) by having made, used, tested, sold or offered for sale, and/or imported into the United States their Distributed Services Cards (“DSCs”) and Data Processing Units (“DPUs”) including at least Elba, Capri, Giglio, and Salina (including AMD DSC2-25G, AMD DSC2-100G, and AMD DSC2-200), as well as their DPU and DSC technology when implemented in other products, services, and offerings, for example the SmartSwitch or AMD Pensando Pollara 400² (collectively, the “Accused Products,” “Accused DPUs,” or “Accused DSCs”). For an example, Defendants directly infringe when they themselves implement, use, or test the Accused Products in the claimed manner discussed herein.

Additionally, Defendants also indirectly infringe the ’753 patent by having induced and/or contributed to third parties’ infringement, including the infringement of Defendants’ customers. In particular, Defendants, through their advertising, marketing, communications with customers and clients, troubleshooting, guidance, testing, setting of default settings, and helping, actively and knowingly aids and abets their customers’ and clients’ infringement, including their use of the Accused Products. Defendants also sold or offered to sell into the United States, or imported into the United States, their Accused Products, which are material components of the infringing implementation and not staple articles of commerce capable of substantial noninfringing use, as shown, for example, at least by Defendants’ own descriptions, guidance, and instructions to implement the Accused Products. Defendants have known of the patents, their infringement, and that the Accused Products are especially made for use in a manner that would infringe the patent when they sold, offered to sell, and/or imported the Accused Products. Further details are provided herein.

¹ Due to the parties’ ongoing negotiations regarding the protective order, these contentions incorporate Plaintiffs’ review of the source code but do not explicitly refer to the source code.

² <https://www.tomshardware.com/networking/amd-unveils-industrys-first-ultra-ethernet-ready-network-card-for-ai-and-hpc>, CV-AMD0016365; CV-AMD0017532. The Pollara incorporates Defendants’ DPU and DSC technology. AMD-CV-0005535.

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Theories exemplifying how the Accused Products infringe the asserted claims of the '753 patent are detailed herein. The products included are representative; on information and belief, all Accused Products function in substantially the same manner as one or more of the examples provided, and include generally the same components. For example, for purposes of infringement of the '753 patent, Defendants' Elba, Capri, Giglio, and Salina versions operate, in relevant part, in the same manner, and thus infringe in substantially the same way. *See* AMD-CV-0002195–AMD-CV-0002196; AMD-CV-0004986–AMD-CV-0005004 at AMD-CV-0004988; AMD-CV-0003945–AMD-CV-0004184 at AMD-CV-0003962; AMD-CV-0002195; AMD-CV-0004986; Defendants' Response to Interrogatory Nos. 1, 2. The following documents provide additional support for Plaintiffs' infringement theories documented herein: AMD-CV-0001962; AMD-CV-0000001; AMD-CV-0000608; AMD-CV-0000643; AMD-CV-0000935; AMD-CV-0000988; AMD-CV-0000994; AMD-CV-0001126; AMD-CV-0001155; AMD-CV-0002797; AMD-CV-0002200; AMD-CV-0004235; AMD-CV-0003945–AMD-CV-0004184; Defendants' Response to Interrogatory Nos. 1, 2. This is further shown by the evidence for the various versions cited herein.

Claim Language	Infringement Contentions and Exemplary Evidence of Infringement
[1pre] A platform for data flow processing, comprising:	To the extent the preamble is limiting, Defendants make, use, test, sell, and offer to sell the claimed platform for data flow processing, including by making, using, testing, selling, and offering to sell the Accused Products; implementing and/or testing those Accused Products in their own platforms; and providing them to customers. <i>See, e.g.</i>, AMD-CV-0003945–AMD-CV-0004184. For example, the AMD Pensando Distributed Services Cards (DSCs) or AMD Pensando Distributed Modules (DSMs) are Data Processing Unit (DPU) enabled systems deployed in Server, Smart Switch, and Appliance platforms for data flow processing and for providing various infrastructure services.

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	https://www.servethehome.com/amd-acquires-pensando-for-its-dpu-future-intel-ipu-nvidia-bluefield-marvell-octeon-fungible/, CV-AMD0016148.
[1e] (continued) and supporting messaging-based communication using packets each	The Accused Products comprise a network coupled to the one or more swappable pods or cards and supporting messaging-based communication using packets each having a header with a chassis identifier, a board identifier, a module identifier, an instance identifier, and a type identifier, so that each type of module,

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having a header with a chassis identifier, a board identifier, a module identifier, an instance identifier, and a type identifier, so that each type of module, each instance of a type of module, and each module on each board in each chassis can be addressed through the header.	each instance of a type of module, and each module on each board in each chassis can be addressed through the header. For example, the network is coupled to the AMD Pensando DSCs and supports a messaging-based communication using packets each having a header with a chassis identifier, a board identifier, a module identifier, an instance identifier, and a type identifier, so that each type of module, each instance of a type of module, and each module on each board in each chassis can be addressed through the header. The portions of the header that allow the chassis, board, type of module, each instance of a type of module, and each module on each board in each chassis to be addressed through the header are the claimed “identifier[s].” Solutions Brief, Guardicore Integration with Pensando Distributed Services Cards (2021), CV-AMD0016400.

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	In particular MAC address of DSS (distributed services switch), Unit ID for DSM (distributed services module), DSM Internal IP, and VLAN/VNIC ID (examples of “chassis identifier[s]” and “board identifiers”) are used for messaging based communication and are each within the claimed “header.” These (and the other components of the headers identified within these contentions) make up the claimed “identifiers.” For example, as shown below, the “devicename,” “serialnumber,” and “unitid” are “chassis identifier” and “board identifier;” and the “P4 to Arm-CPU header,” which is “attached to the packet PHV header” are “module identifier,” “instance identifier,” and “type identifier” (<i>see</i> the evidence provided below). Furthermore, vnic id or lif id (logical interface) is an example of the module identifier, instance identifier, and type identifier. There can be two different types of LIFs in the accused products - physical function (PF) and virtual function (VF). The type identifier of lif is represented by the attribute lif_type (as shown below in AMD-CV-0000371) and the instance identifier of PF (or VF) is represented by the attribute pf_id (or vf_id). LIFs enable efficient handling of virtualized and containerized environments by mapping physical network interfaces to logical ones. Table: Packet 1 - Redirect Action - Test Packet Header Information <table><tr><th>Receiving Port</th><th>Destination MAC</th><th>Destination IP</th><th>Destination Port</th><th>Source IP</th><th>Source Port</th><th>Protocol</th></tr><tr><td>Eth 1/2</td><td>00:00:00:00:10:02</td><td>1.2.3.4</td><td>456</td><td>2.3.4.5</td><td>345</td><td>UDP</td></tr></table>	Receiving Port	Destination MAC	Destination IP	Destination Port	Source IP	Source Port	Protocol	Eth 1/2	00:00:00:00:10:02	1.2.3.4	456	2.3.4.5	345	UDP
Receiving Port	Destination MAC	Destination IP	Destination Port	Source IP	Source Port	Protocol									
Eth 1/2	00:00:00:00:10:02	1.2.3.4	456	2.3.4.5	345	UDP									

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	and provide and support the claimed messaging-based communication. In particular, the Link Layer Discovery Protocol headers that AMD Pensando DSCs utilize are the claimed “headers” and include the claimed “identifier[s],” such as the “chassis identification,” “port ID,” “port description,” system name and description,” “device capability,” and “IP/MAC address.” <i>See, e.g.</i>, AMD-CV-0000177 (listing identifiers). Using LLDP, device information such as chassis identification, port ID, port description, system name and description, device capability (as router, switch, hub...), IP/MAC address, etc., are transmitted to the neighboring devices. This information is also stored in local Management Information Databases (MIBs), and can be queried with the Simple Network Management Protocol (SNMP). The LLDP-enabled devices have an LLDP agent installed in them, which sends out advertisements from all physical interfaces either periodically or as changes occur. https://www.whatsupgold.com/network-discovery/link-layer-discovery-protocol-lldp, CV-AMD0016369.

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[2] The platform of claim 1, further comprising: at least a subset of the one or more swappable pods or cards having an option for direct connection to one or more pods, cards or components, bypassing the module messaging interface network.	The Accused Products include at least a subset of the one or more swappable pods or cards having an option for direct connection to one or more pods, cards or components, bypassing the module messaging interface network. For example, based on information and belief, multiple AMD Pensando DSCs can be deployed within a single server and these AMD Pensando DSCs are connected to each other without using the module messaging interface network.

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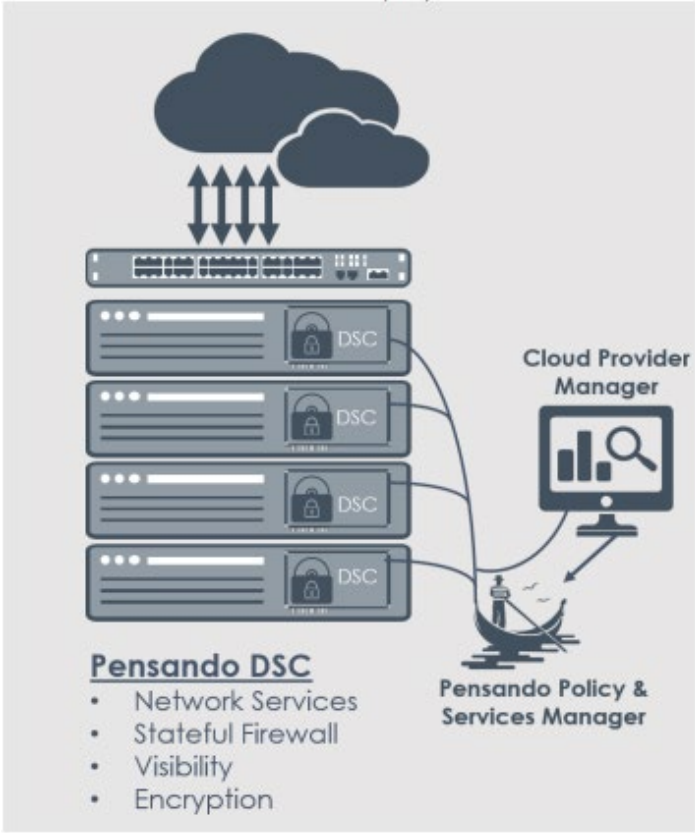
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	<i>Distributed Services Cards Deployed in Servers</i>  Pensando DSC • Network Services • Stateful Firewall • Visibility • Encryption Cloud Provider Manager Pensando Policy & Services Manager https://cmssc28productionstorage.blob.core.windows.net/article-assets/5eeeb987d386d2c61a5e67b0-2.pdf, CV-ADM0016073.

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[4] The platform of claim 1, further comprising: at least one of the one or more swappable pods or cards having a plurality of types of memory and memory superposition with selectable arrangement of the plurality of types of memory as multilevel cache, interleaved memory, swapped memory over a specified	The Accused Products include at least one of the one or more swappable pods or cards having a plurality of types of memory and memory superposition with selectable arrangement of the plurality of types of memory as multilevel cache, interleaved memory, swapped memory over a specified address range, and memory allocated to specified address ranges according to parameterized task needs. The Accused Products support/handle various types of memory to optimize performance (<i>e.g.</i>, various memory types like SRAM, TCAM, DRAM memory cache, DDR4/5). The claimed “memory and memory superposition”³ have selectable arrangement of the plurality of types of memory as multilevel cache, interleaved memory, swapped memory over a specified address range, and memory allocated to specified address ranges according to parameterized task needs.

³ AMD’s documentation shows the claimed “memory and memory superposition.” *See* AMD-CV-0001163 (“coherent L1 and L2 caches, a shared local memory system, flash non-volatile memory, . . . and miscellaneous IO devices for operation and debug”); AMD-CV-0001166 (“Capri Memory Capri includes an internal HBM memory system for running Linux, storing large data structures such as flow tables and other analytics, and providing buffering resources for advanced features including TCP termination and proxy, deep packet inspection, storage offloads, and connected FPGA functions. The memory system consists of one High Bandwidth Memory (HBM) module which supports 4GB capacity or 8GB capacity, depending on package and HBM.”); AMD-CV-0005057 (“HBM Memory”); AMD-CV-0001167 (“P4+ caches”); AMD-CV-0000622 (“Linux Memory” “P4 ‘Device’ Memory”).

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of swappable pods or cards;	
[7c] communicating a data flow in accordance with the implemented data flow processing architecture among one or more hardware modules or one or more software modules in each of the plurality of swappable pods or cards, including the user-definable hardware modules or user-definable software modules; and	The Accused Products (including the systems, platforms, and networks in which they are implemented) communicate a data flow in accordance with the implemented data flow processing architecture among one or more hardware modules or one or more software modules in each of the plurality of swappable pods or cards, including the user-definable hardware modules or user-definable software modules. <i>See claim elements 1c and 1d.</i>
[7d] selecting a memory superposition in at least one of the plurality of	The Accused Products select a memory superposition in at least one of the plurality of swappable pods or cards having a plurality of types of memory with selectable arrangement of the plurality of types of memory

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swappable pods or cards having a plurality of types of memory with selectable arrangement of the plurality of types of memory as multilevel cache, interleaved memory, swapped memory over a specified address range, and memory allocated to specified address ranges according to parameterized task needs.	as multilevel cache, interleaved memory, swapped memory over a specified address range, and memory allocated to specified address ranges according to parameterized task needs. <i>See claim 4.</i>
[8] The method of claim 7, wherein the communicating the data flow comprises:	The Accused Products (including the systems, platforms, and networks in which they are implemented) communicate the data flow through the messaging interface network, comprising a network coupled to the plurality of swappable pods or cards and supporting messaging-based communication using packets each having a header with a chassis identifier, a board identifier, a module identifier, an instance identifier, and a