

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

**PARTHENON UNIFIED MEMORY
ARCHITECTURE LLC,**

Plaintiff,

v.

**ZTE CORP., ZTE USA, INC. and
ZTE (TX), INC.,**

Defendants.

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Case No. 2:15-cv-225-JRG-RSP

PLAINTIFF PARTHENON UNIFIED MEMORY ARCHITECTURE LLC'S
REPLY CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

PUMA's proposed constructions are rooted in both the intrinsic and extrinsic evidence and are consistent with the previous claim construction order signed by Judge Leonard Davis relating to the asserted patents. Together, PUMA's constructions strive to promote clarity and avoid jury confusion while giving effect to the claim language's full scope. In contrast, ZTE's constructions work against those interests by incorporating terms that appear *nowhere* in the asserted patents. For the reasons below, ZTE's constructions should be rejected.¹

II. TERMS FOR CONSTRUCTION

A. "bus"

Term	PUMA's Proposal	Defendants' New Proposal
"bus"	No construction necessary. Alternatively: "a signal line or a set of associated signal lines to which a number of devices are coupled and over which information may be transferred between them"	"a signal line or set of associated signal lines to which a number of devices are connected and over which information may be transferred by only one device at a time"

In response to PUMA's Opening Brief, ZTE has removed the word "directly" from its proposed construction, and the parties' only remaining dispute is over ZTE's proposed requirement that "information may be transferred by only one device at a time."

ZTE's construction is problematic because it would read out common bus technologies like split-transaction buses and the Mercury Raceway bus. With respect to split-transaction buses, ZTE is admits that multiple devices can use a split-transaction bus at the same time to transfer

¹ For many of the disputed terms, PUMA notes that ZTE explicitly incorporates by reference the briefing and arguments made by the defendants in related Case Nos. 2:14-cv-690 and/or 2:14-cv-902 in lieu of ZTE submitting its own briefing. Out of concern for the local rules and this Court's page limits, PUMA has endeavored to confine its own responses to this Reply Brief. However, to the extent the Court considers briefing and arguments that have been incorporated by reference, PUMA respectfully incorporates by reference its own corresponding briefing and arguments.

information: “while the request is being worked on, other devices can transmit on the bus.” *See* ZTE Responsive Brief, Dkt. 60 at 9. As a result, ZTE’s construction would read out split-transaction buses. However, ZTE attempts to escape this conclusion by differentiating between “request” transactions and “response” transactions and suggesting that a split-transaction bus can only handle one of each type of transaction at a given time. Even if true, though, ZTE’s construction does not reflect this distinction, and the concept of “request” transactions and “response” transactions are not discussed in the asserted patents. As a result, ZTE’s interpretation of its own proposed construction would only add to the risk of Jury confusion.

Moreover, ZTE’s attempt to distinguish split-transaction buses does not apply to the Mercury Raceway bus: even ZTE admits that its proposed construction would read out this type of bus. *See* ZTE Responsive Brief, Dkt. 60 at 10 (stating that “PUMA is correct that the term ‘bus’ as used in the patents-in-suit would not read on Mercury Raceway”). Normally, such an admission would be the end of the dispute. The patents use the term “bus” broadly and the patentees did not restrict or disclaim any particular type of bus. As a result, ZTE’s attempt to carve out a non-infringement defense by restricting the term “bus” to only certain types of buses should be rejected.

In response, ZTE argues that the Mercury Raceway bus is not a bus. However, persons of ordinary skill in the art disagree with ZTE. The exhibits submitted by PUMA repeatedly refer to the Mercury Raceway bus as *a bus*. *See* Dkt. 56, Ex. N at 203 (noting that “some currently available choices for a data bus” include the “RACEway (Mercury Computer)”); Dkt. 56, Ex. M at 31 (stating that “[t]he Mercury Raceway bus is an important part of the IFP architecture” and that “[t]he P2 connector is also used to propagate the Raceway bus from board to board”). Because ZTE cannot refute those exhibits, ZTE instead focuses entirely on just one of PUMA’s exhibits. However, Exhibit O does not say that the Raceway bus is *not* a bus, and the portion quoted by

ZTE actually supports PUMA's position. The document states that the Mercury Interlink modules transform the topology from "a single transaction bus to a scalable real-time fabric." In other words, the document is distinguishing between two types of buses: "single transaction buses" and "real-time fabrics." Otherwise, under ZTE's argument, the phrase "single transaction" would be entirely redundant because all buses would presumably be "single transaction" buses.

Indeed, the technical documents from Qualcomm that are central to this case refer to a fabric as a type of bus. As mentioned in PUMA's Opening Brief, the defendants in related Case No. 2:14-cv-902 represented to the Court during the claim construction hearing that a fabric was distinct from a bus. In response, PUMA informed the Court that even Qualcomm's own documentation refers to fabrics as buses. *See, e.g.*, Dkt. 56, Ex. X at 67 (noting that there are "three buses that span the entire MSM device" and listing the "system fabric," the "applications fabric" and the "system fast peripheral bus.") (shown at the hearing).

PUMA raises this evidence for the simple purpose of assuring the Court that persons of ordinary skill in the art have always understood the term "bus" to be broad and inclusive. From the Mercury Raceway bus to Qualcomm's system fabric and applications fabric, persons of ordinary skill in the art have not restricted the term "bus" in the manner urged by ZTE. Instead, the concept of a "bus" has always included various bus technologies like split-transaction buses and the Mercury raceway bus. Because ZTE's construction would unduly restrict this term, the Court should reject it and adopt PUMA's proposed construction.

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