

US007921323B2

# (12) United States Patent

## Yancey et al.

## (10) **Patent No.:**

US 7,921,323 B2

### (45) **Date of Patent:**

Apr. 5, 2011

#### (54) RECONFIGURABLE COMMUNICATIONS INFRASTRUCTURE FOR ASIC NETWORKS

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(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 1104 days.

(21) Appl. No.: 11/600,934

(22) Filed: **Nov. 16, 2006** 

(65) **Prior Publication Data** 

US 2007/0101242 A1 May 3, 2007

#### Related U.S. Application Data

- (63) Continuation-in-part of application No. 10/843,226, filed on May 11, 2004, now Pat. No. 7,444,454.
- (51) **Int. Cl. G06F 13/00**

(2006.01)

- (52) U.S. Cl. ...... 714/4

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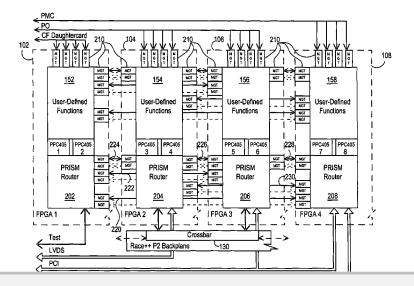
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#### (57) ABSTRACT

Reconfigurable communications infrastructures may be implemented to interconnect ASIC devices (e.g., FPGAs) and other computing and input/output devices using high bandwidth interconnection mediums. The computing and input/output devices may be positioned in locations that are physically segregated from each other, and/or may be provided to project a reconfigurable network across a wide area. The reconfigurable communications infrastructures may be implemented to allow such computing and input/output devices to be used in different arrangements and applications, e.g., for use in any application where a large array of ASIC devices may be usefully employed such as supercomputing, etc.

### 34 Claims, 18 Drawing Sheets





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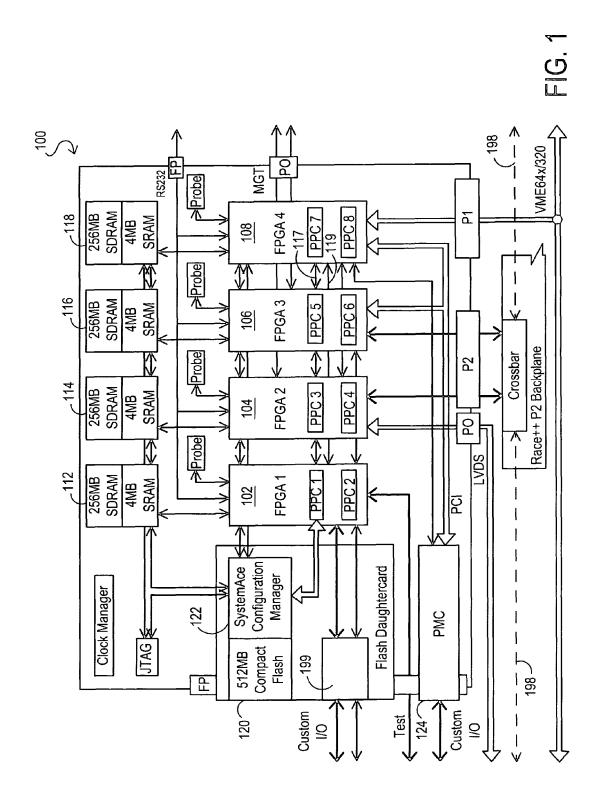
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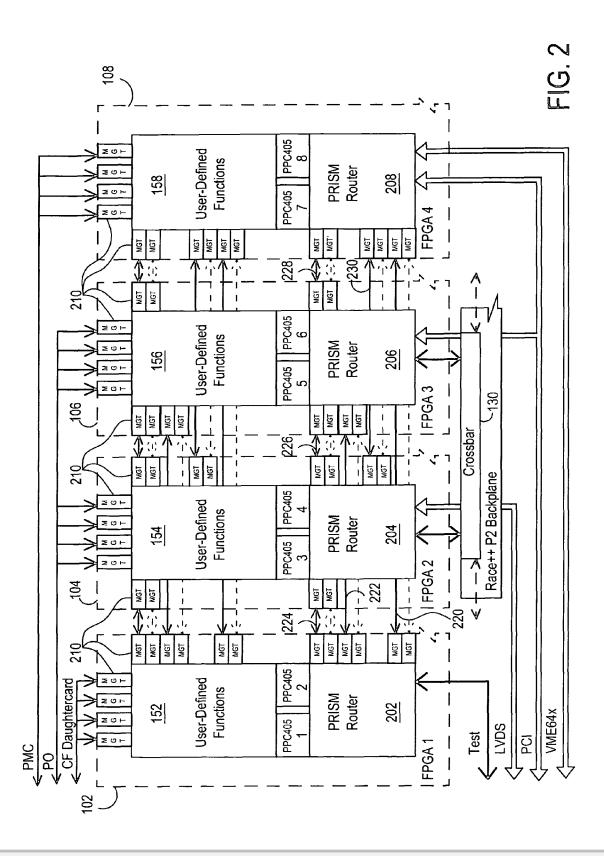
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