Telecom and Networking Boards- An Overview

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Now that we have analyzed the supply-side of VMEbus product availability in processors and backplanes this year, it's time to look at telecom and networking boards. After all, over 20% of the demand for VMEbus boards comes from the communications markets.

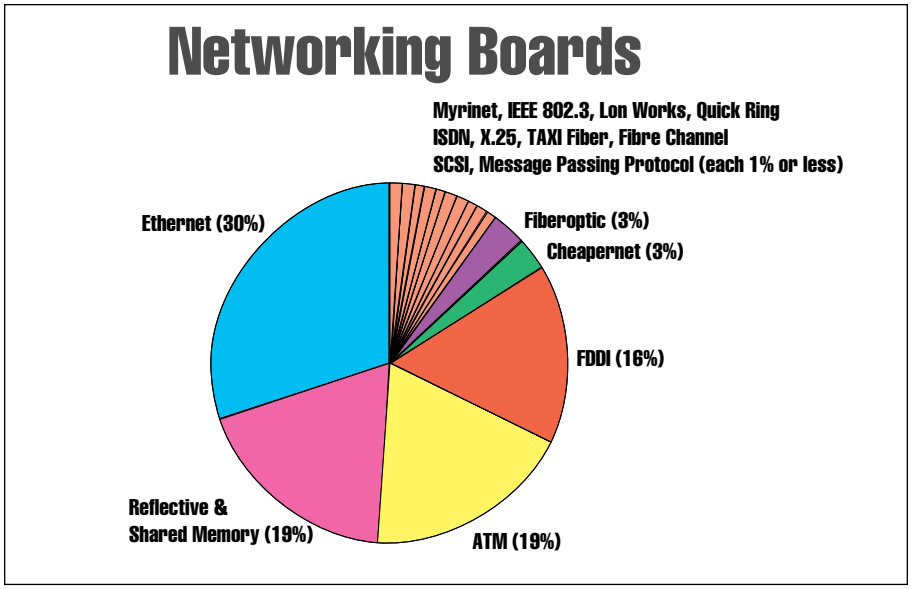
In telecom boards, the T1/E1 interfaces make up 20% of the available interface cards, followed by ISDN cards at 17% of the total boards available from manufacturers. Then, simple T1 boards (11%) and E1 boards (11%) make up the remainder of the majority.

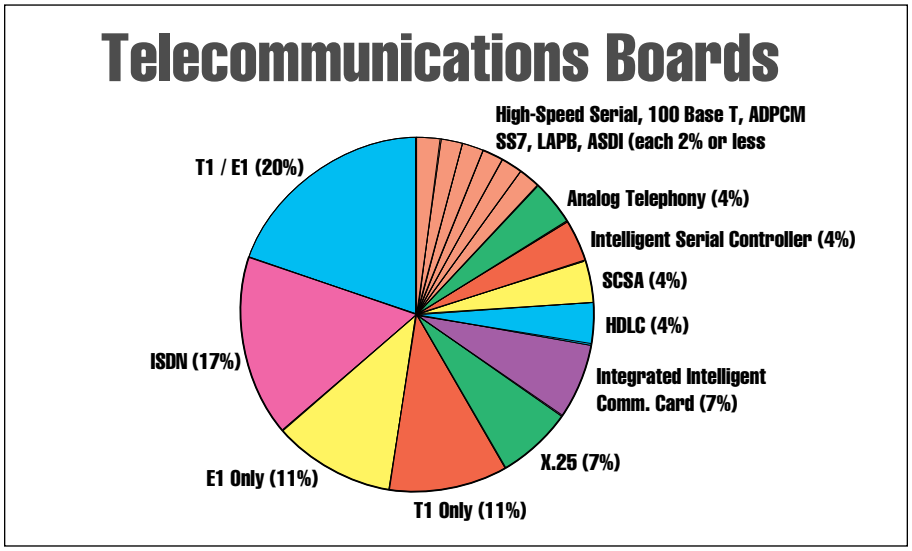
The next segments of product availability are X.25 cards (7%), integrated communications cards (7%), HDLC interfaces (4%), SCSA (a TDM P-2 bus on VME) at 4%, intelligent serial controllers (4%), and analog telephony cards (4%). The remaining interface boards are all 2% of the total or less.

In networking cards, the availability of Ethernet cards (30%) still takes first place, followed by reflective memory interfaces at 19% of the total boards available. Many applications are using reflective memory concepts, particularly in military applications.

ATM boards are next at 19% followed by FDDI cards at 16% of the total available networking cards. While ATM cards are primarily used in telco applications, I see most of the FDDI cards being used in military applications again. After these categories, the remaining networking interface technologies are small market segments.

It's interesting to see that neither Fibre Channel nor ATM cards have yet taken over the top spot as the most-available networking interface. And, the new 100BaseT is rising while the industry has a lot of interest in 1000BaseT high-speed Ethernet interfaces. Since Ethernet technology has the largest market share in networking, I suspect 100 and 1000BaseT interfaces will become more available than Fibre Channel or ATM interfaces in the next year or so.





Source: VMEbus Product Directory © 1997 VITA

While we all have difficulty keeping up with the latest processor technology, memory architecture, and chip sets, the telecommunications markets are inventing and introducing other new mainstream communications technologies (like ADSL) and they are just beginning to appear. In the next year, I expect to see several new categories of communications and networking cards in the market.

And, when you consider that many of the communications interfaces are being implemented on mezzanine cards (like IP, PMC, etc) that can simply plug into the main CPU or carrier board in a VMEbus system, I would also expect to see a decline in the number of dedicated VME communications interface cards available today.