Memory Type	Maximum Size	On Chip?	Typical Use
GP Registers	256 (2 banks)	yes	Intermediate computation
Inst. Cache	32 Kbytes	yes	Recently used instructions
Data Cache	32 Kbytes	yes	Recently used data
Mini Cache	2 Kbytes	yes	Data that is reused once
Write buffer	unspecified	yes	Write operation buffer
Local memory	2560 bytes / μeng.	yes	Register spills and caching
Scratchpad	16 Kbytes	yes	IPC and synchronization
Inst. Store	4 Kbytes / μeng.	yes	Microengine instructions
FlashROM	unspecified	no	Bootstrap
SRAM	64 Mbytes	no	Tables or packet headers
DRAM	2 Gbytes	no	Packet storage

Figure 17.8 Examples of the memories on Intel's IXP2xxx. Some memories are available to microengines and others are available to the XScale. Larger memories are external to the chip.