

Register specifier	microMIPS64	RV64GC	Thumb-2
3-bit	2-7,16, 17	8-15	0-7
Stack pointer register	29	2	0 (when used in load/store)
Global pointer register	28		
Return address register	31	1	14
Using special register	Stack pointer or global pointer; 5-bit offset	Stack pointer; 5-bit offset	Stack pointer; 8-bit offset

**FIGURE E.5 Summary of data addressing modes supported by the embedded architectures.** microMIPS64, RV64c, and Thumb-2 show only the modes supported in 16-bit instruction formats. The stack pointer in RV64GC and micro- MIPS64 is a designed GPR; it is another version of r31 is Thumb-2. In microMIPS64, the global pointer is register 30 and is used by the linkage convention to point to the global variable data pool. Notice that typically only 8 registers are accessible as base registers (and as we will see as ALU sources and destinations).