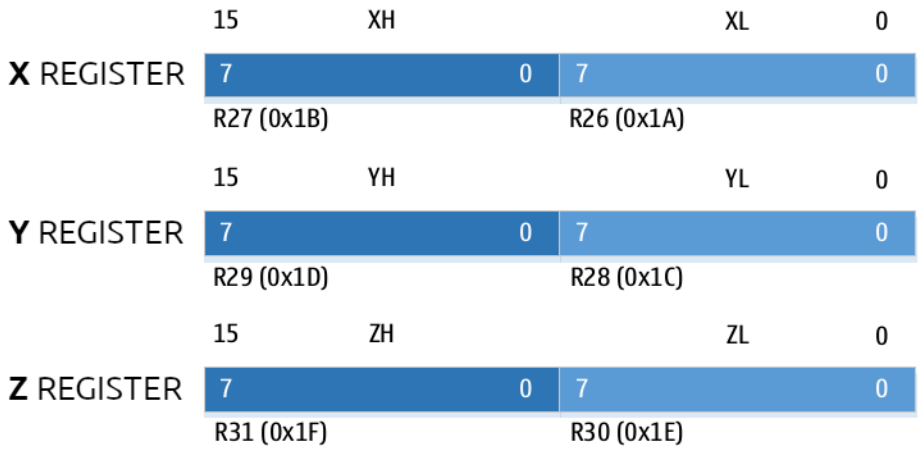
LGT8XM GENERAL PURPOSE REGISTER

Most of the instructions operating on the Register File have direct access to all registers, and most of them are single cycle instructions. As shown in the figure above, each register is also assigned a data memory address, mapping them directly into the first 32 locations of the user Data Space. Although not being physically implemented as SRAM locations, this memory organization provides great flexibility in access of the registers, as the X-, Y- and Z-Pointer registers can be set to index any register in the file.

X/Y/Z REGISTER

Registers R26...R31 can be combined in pairs to form three 16-bit registers. These three 16-bit registers are mainly used as address pointers for indirect addr--essing access. The X/Y/Z registers are structured as follows:



These registers are used as fixed offset, auto-increment, and auto-decrement address pointers in different addressing modes. See the Inst--ruction Description section for details.