```
/* Allocate eight SDRAM transfer registers to hold the packet header */
xbuf_alloc [ $$hdr, 8 ]

/* Reserve two general-purpose registers for the computation */
.local base offset

        /* Compute the SDRAM address of the data buffer */
        Buf_GetData [ base, dl_buffer_handle ]

        /* Compute the byte offset of the start of the packet in the buffer */
        DL_GetBufferOffset [ offset ]

        /* Convert the byte offset to SDRAM words by dividing by eight */
        /* (shift right by three bits) */
        alu_shf [ offset, – –, B, offset, >>3 ]

        /* Load thirty-two bytes of data from SDRAM into eight SDRAM */
        /* transfer registers.  Start at SDRAM address  base + offset */
        sdram [ read, $$hdr0, base, offset, 4 ]

/* Inform the assembler that we have finished using the two */
/* registers: base and offset */
.endlocal

/* Process the packet header in the SDRAM transfer registers
/* starting at register $$hdr */
. . .

/* Free the SDRAM transfer registers when finished */
xbuf_free [ $$hdr ]
```