24-bit scaler reader
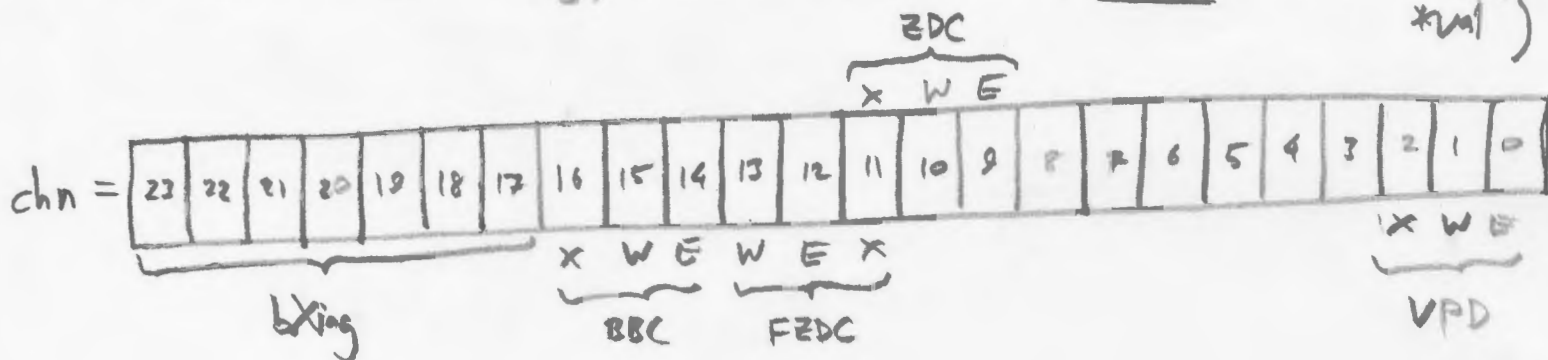
sca_read_bin (int debug, FILE *infile, int *num, int* chn, unsigned long long *val)

$$bXing = (chn >> 17) \& \underbrace{1 \cdots 1}_{7}$$

$$c = chn \& \underbrace{1 \cdots 1}_{17}$$

- chn BBC $= c \& 111 \underbrace{0 \cdots 0}_{14}$

- chn ZDC $= c \& \underbrace{0 \cdots 0}_{5} 111 \underbrace{0 \cdots 0}_{9}$

- chn FZDC $= c \& 000\ 111 \underbrace{0 \cdots 0}_{11}$

- chn VPD $= c \& \underbrace{0 \cdots 0}_{14} 111$

	X	W	E
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0
5	1	0	1
6	1	1	0
7	1	1	1