

## 4-point High-Pass FIR Filter Pseudocode Description

```
idle:  if (data_ready = 0) goto idle;
store: if (data_ready = 0) goto idle;
      reg[5] = data;
      err = 0;
zero:  reg[0] = 0;
sort1: reg[1] = reg[2];
sort2: reg[2] = reg[3];
sort3: reg[3] = reg[4];
sort4: reg[4] = reg[5];
mul1:  reg[10] = reg[1] * reg[6];
add1:  reg[0] = reg[0] + reg[10];
      if (V) goto idle;
mul2:  reg[10] = reg[2] * reg[7];
sub2:  reg[0] = reg[0] - reg[10];
      if (V) goto idle;
mul3:  reg[10] = reg[3] * reg[8];
add3:  reg[0] = reg[0] + reg[10];
      if (V) goto idle;
mul4:  reg[10] = reg[4] * reg[9];
sub4:  reg[0] = reg[0] - reg[10];
      if (V) goto idle;
      else goto idle;
idle:  err = 1;
      if (data_ready) goto store;
      else goto idle;
```