```
0x0034          out   SPH,r16        ; Set Stack Pointer to top of RAM
0x0035          ldi   r16, low(RAMEND)
0x0036          out   SPL,r16
0x0037          sei                  ; Enable interrupts
0x0038          <instr>  xxx
   ...    ...    ...   ...
```

When the BOOTRST Fuse is unprogrammed, the Boot section size set to 2K bytes and the IVSEL bit in the MCUCR Register is set before any interrupts are enabled, the most typical and general program setup for the Reset and Interrupt Vector Addresses in ATmega168P is:

```
Address  Labels Code                 Comments
0x0000   RESET: ldi   r16,high(RAMEND); Main program start
0x0001          out   SPH,r16        ; Set Stack Pointer to top of RAM
0x0002          ldi   r16,low(RAMEND)
0x0003          out   SPL,r16
0x0004          sei                  ; Enable interrupts
0x0005          <instr>  xxx
;
.org 0x1C02
0x1C02          jmp   EXT_INT0        ; IRQ0 Handler
0x1C04          jmp   EXT_INT1        ; IRQ1 Handler
...             ...   ...             ;
0x1C32          jmp   SPM_RDY         ; Store Program Memory Ready Handler
```

When the BOOTRST Fuse is programmed and the Boot section size set to 2K bytes, the most typical and general program setup for the Reset and Interrupt Vector Addresses in ATmega168P is:

```
Address  Labels Code              Comments
.org 0x0002
0x0002          jmp   EXT_INT0       ; IRQ0 Handler
0x0004          jmp   EXT_INT1       ; IRQ1 Handler
...             ...   ...            ;
0x0032          jmp   SPM_RDY        ; Store Program Memory Ready Handler
;
.org 0x1C00
0x1C00   RESET: ldi   r16,high(RAMEND); Main program start
0x1C01          out   SPH,r16        ; Set Stack Pointer to top of RAM
0x1C02          ldi   r16,low(RAMEND)
0x1C03          out   SPL,r16
0x1C04          sei                  ; Enable interrupts
0x1C05          <instr>  xxx
```

When the BOOTRST Fuse is programmed, the Boot section size set to 2K bytes and the IVSEL bit in the MCUCR Register is set before any interrupts are enabled, the most typical and general program setup for the Reset and Interrupt Vector Addresses in ATmega168P is: