

```

uint64_t Bitwalker_Peek(unsigned int Startposition, unsigned int Length,
                        uint8_t *Bitstream, unsigned int BitstreamSizeInBytes)
{
    uint64_t __retres;
    uint64_t retval;
    unsigned int i;
    /*@ assert
       rte: unsigned_overflow:
       0 <= (unsigned int)(Startposition+Length)-(unsigned int)1;
    */
    /*@ assert rte: unsigned_overflow: 0 <= Startposition+Length; */
    /*@ assert rte: unsigned_overflow: Startposition+Length <= 4294967295; */
    if (((Startposition + Length) - (unsigned int)1) >> 3 >= BitstreamSizeInBytes) {
        __retres = (unsigned long long)0;
        goto return_label;
    }
    retval = (unsigned long long)0;
    i = Startposition;
    while (1) {
        /*@ assert rte: unsigned_overflow: 0 <= Startposition+Length; */
        /*@ assert rte: unsigned_overflow: Startposition+Length <= 4294967295; */
        if (!(i < Startposition + Length)) {
            break;
        }
        {
            uint8_t CurrentValue;
            /*@ assert rte: mem_access: \valid_read(Bitstream+(unsigned int)(i>>3));
            */
            /*@ assert rte: index_bound: (unsigned int)(i&(unsigned int)0x07) < 8;
            */
            CurrentValue = (unsigned char)((int)*(Bitstream + (i >> 3)) & (int)BitwalkerBitMaskTable[
                i & (unsigned int)0x07]);

            /*@ assert
               rte: unsigned_overflow:
               0 <=
               (unsigned long long)(retval<<1)+(unsigned long long)((unsigned char)
                                                           ((int)
                                                           ((int)CurrentValue!=0)));

            */
            /*@ assert
               rte: unsigned_overflow:
               (unsigned long long)(retval<<1)+(unsigned long long)((unsigned char)
                                                           ((int)
                                                           ((int)CurrentValue!=0)))
               <= 18446744073709551615;
            */
            retval = (retval << 1) + (uint64_t)((unsigned char)((int)CurrentValue != 0));
        }
        /*@ assert rte: unsigned_overflow: i+1 <= 4294967295; */
        i ++;
    }
    __retres = retval;
    return_label: return __retres;
}

```