Case 0 : Read Req from L1   SENDLINE

   Cache hit :   SENDLINE

          BO
     miss :. Eviction ──→ M :   BO: WRITE (evicted line)
                         GETLINE
                         READ (new line)

         ──→ I :   HIT/HITM ⇒ S
                 NOHIT ─⇒ E

         ⇒ S ⇒ S
         ⇒ E ⇒ E

Case 1 : Write Req from L1

Hit :   ~~BO~~   M → M
                S/E → M

Miss : Eviction   BO: WRITE (evicted line)
        M :   GETLINE (evicted) ──→ M
             INVALIDATE LINE (evicted)
              RWIM (new line)
              SENDLINE (new line)

     S/ E :   RWIM (new line)
           SEND LINE (new line)   ⎫
           INVALIDATE LINE (evicted) ⎬ ─⇒ M
      I :   RWIM (new line)   ⎭
         SEND LINE (new line)

Case 2 : READ REQ from L1 Instr. Cache   SENDLINE

HIT :   SENDLINE

MISS :   EVICTION   E ⎫   READ (new line)   ⎫
               S ⎬   SENDLINE   ⎬   INVALIDATE LINE (evicted)
               I ⎭   ↳ HIT ⇒ S   ⎭
                       NOHIT ⇒ E

Case 3 : Snooped Read Req

  HITM :   M ─→ GETLINE ─→ I
                INVALIDATE LINE (evicted)
               WRITE
  HIT :   E/S ─⇒ same

NOHIT ; I : okay chalta hai.

Case 4 : Snooped Write Request

HIT : E/S ─→ I   INVALIDATE LINE

HITM : BUG

NOHIT : Ignore

Case 5 : Snooped RWIM Request

HIT : S/E ─→ I   INVALIDATE LINE

HITM : M ─→ I   GETLINE
              WRITE

NOHIT: Ignore

Case 6: Snooped INVALIDATE

HITM: M $\rightarrow$ I   GETLING INVALIDATE LINE
                          WRITE

HIT: E/S $\rightarrow$ I   INVALIDATE LINE

NOHIT: Ignore