

Top Level Receiver Draft

```
[Entry]
ctx.NCByte = ctx.Crcflg ? 'C' : NAK;
ctx.sendByte(ctx.NCByte); ctx.KbCan = false;
ctx.errCnt=0; ctx.tm(TM_SOH);
[Exit]
```

```
onEvent(TM)
[C != SOH && !KbCan]
/purge(); ctx.sendByte(NAK);
errCnt++;
ctx.result="Timeout, no SOH received";
```

```
onEvent(SER)
[c == EOT && !KbCan]
/purge();
ctx.sendByte(NAK);
ctx.Push(2*TM_SOH);
```

```
onEvent(SER)
[c != EOT && !KbCan]
/purge();
ctx.sendByte(NAK);
```

```
onEvent(TM)
/ctx.result="Timeout
waiting for 2nd EOT";
```

```
onEvent(TM)
/ctx.can8();
if (ctx.KbCan)
{ctx.result="KbCancelled";}
else
ctx.result="Timeout";
```

```
onEvent(KB_C)
/ctx.can8();
ctx.result="KbCancelled";
```

```
onEvent(CONT)
[!ctx.syncLoss && (ctx.errCnt < errB)
&& !ctx.KbCan]
/if (ctx.goodBlk)
{ctx.sendByte(Ack);
else purge(); ctx.sendByte(NAK);}
if (ctx.goodBlk1st)
{ctx.writeChunk();}
```

```
onEvent(SER)
[c == CAN && !KbCan]
/*ctx.Push(TM_CHAR);*/
```

```
onEvent(SER)
[c==SOH && !KbCan]
/ctx.getRestBlk();
if (ctx.goodBlk1st)
{ctx.errCnt=0;}
else ctx.errCnt++;
```

```
onEvent(SER)
[c==EOT && !KbCan]
/ctx.result="Done";
```

```
onEvent(SER)
[c == CAN && !ctx.KbCan]
/ctx.result="SendCancelled";
/*ctx.clearCan();*/
```

```
onEvent(KB_C)
/ctx.KbCan=true;
```

```
onEvent(SER)
[c == CAN && !KbCan]
/*ctx.tmPop();
ctx.Push(TM_CHAR);*/
```

```
onEvent(CONT)
[ctx.syncLoss || ctx.errCnt >= errB]
/ctx.can8();
if (ctx.syncLoss)
ctx.result="LossOfSynchronization";
else
ctx.result="ExcessiveErrors";
```

```
onEvent(SER)
/cerr << "Receiver received totally unexpected char #" << c << " : " << (char) c << endl;
exit(EXIT_FAILURE);
```

```
onEvent(SER)
[ctx.KbCan]
/ctx.can8();
ctx.result="KbCancelled";
```

Conditional Transient

```
[Entry]
//POST(" ", CONT)
[ctx.goodBlk]=true, ctx.getRestBlk();
/if (!ctx.goodBlk1st) || (Crcflg && ctx.BytesRd >
BLK_SZ_CRC || (!Crcflg && ctx.BytesRD > BLK_SZ_CS
{purge();}
ctx.goodBlk1st = ctx.goodBlk();
[Exit]
```

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