# A

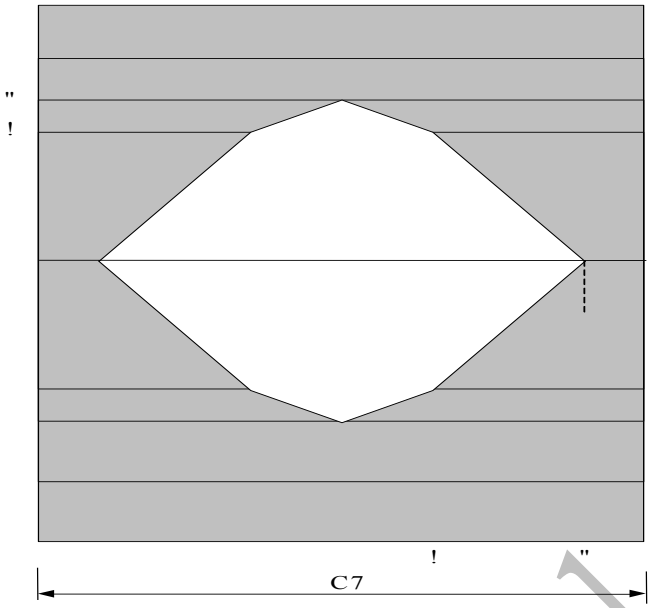



Figure 2 Mask of diagram

| | 155.52 Mbit/s | 622.08 Mbit/s | 1244.16 Mbit/s | 2488.32 Mbit/s |
|---|---|---|---|---|
| x1/x4 | 0.10/0.90 | 0.20/0.80 | 0.22/0.78 | For further study |
| x2/x3 | 0.35/0.65 | 0.40/0.60 | 0.40/0.60 | For further study |
| y1/y4 | 0.13/0.87 | 0.15/0.85 | 0.17/0.83 | For further study |
| y2/y3 | 0.20/0.80 | 0.20/0.80 | 0.20/0.80 | For further study |

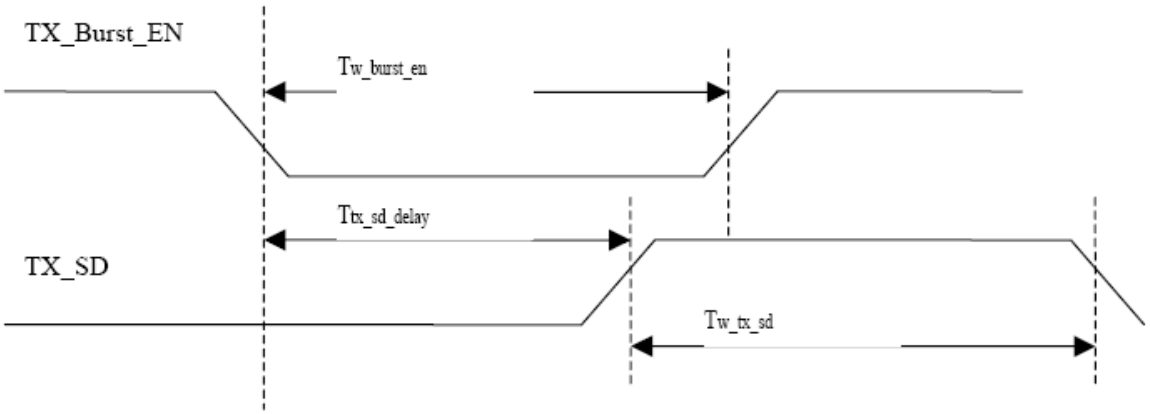
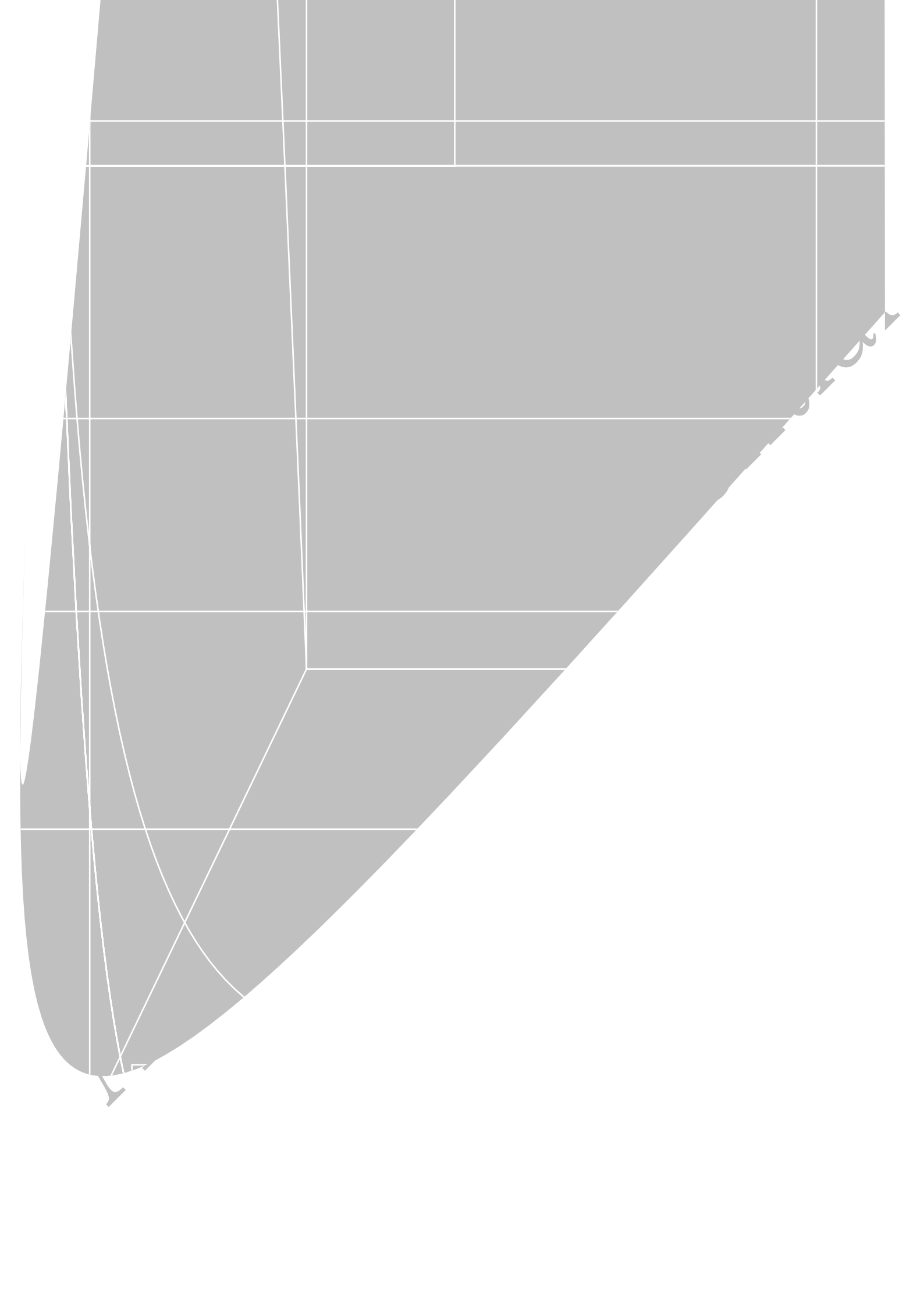



Figure 3 Timing diagram of TX_SD



TX Power = TX Power (Digital Value) X 0.1μW
RX Power = RX Power (Digital Value) X 0.1μW

Table 2.1 Logic Status and AD Conversion Updates

| Byte | Bit | Name | Description |
|---|---|---|---|
| 110 | 7 | Reserved | |
| 110 | 6 | Soft Tx Disable Control | 1= disable, 0= enable. |
| 110 | 5 | Reserved | Set to 0. |
| 110 | 4 | Rx Rate Select State | Not supported (set to 0). |
| 110 | 3 | Soft Rate Select Control | Not supported (set to 0). |
| 110 | 2 | Tx Fault | 1= fault, 0= normal. |
| 110 | 1 | RX-SD | 1= SD, 0= LOS. |
| 110 | 0 | Power on Logic | Not supported (set to 0). |
| 111 | 7-0 | Temp A/D Valid | Not supported (set to 0). |

Each of the measured values has a corresponding high alarm, low alarm, high warning and low warning threshold level at location 00-39(x0A2) written as the data format of a corresponding valued shown in Table 2.2. Alarm and warning flags at bytes 112-119(0xA2) are defined as follows.

(1) Alarm flags indicate conditions likely to result (or have resulted) in link failure and cause for immediate action.

(2) Warning flags indicate conditions outside the guaranteed operating specification of transceiver but not necessarily causes of immediate link failures.

Table 2.2 Alarm and Warning Flags

| Byte | Bit(s) | Name | Description |
|---|---|---|---|
| 112 | 7 | Temperature High Alarm | Set when temperature monitor value exceeds high alarm level. |
| 112 | 6 | Temperature Low Alarm | Set when temperature monitor value exceeds low alarm level. |
| 112 | 5 | Vcc High Alarm | Set when Vcc monitor value exceeds high alarm level. |
| 112 | 4 | Vcc Low Alarm | Set when Vcc monitor value exceeds Low alarm |

| | | | |
|---|---|---|---|
| 116 | 4 | Vcc Low warning | Set when Vcc monitor value exceeds Low warning level. |
| 116 | 3 | Laser Bias High warning | Set when laser bias monitor value exceeds high warning level. |
| 116 | 2 | Laser Bias Low warning | Set when laser bias monitor value exceeds low warning level. |
| 116 | 1 | Tx Power High warning | Set when Tx power monitor value exceeds high warning level |
| 116 | 0 | Tx Power Low warning | Set when Tx power monitor value exceeds low warning level. |
| 117 | 7 | Rx Power High warning | Set when Rx power monitor value exceeds high warning level |
| 117 | 6 | Rx Power Low warning | Set when Rx power monitor value exceeds low warning level |
| 117 | 5-0 | Reserved | |
| 118 | 7-0 | Reserved | |
| 119 | 7-0 | Reserved | |

## 8 Block Diagram

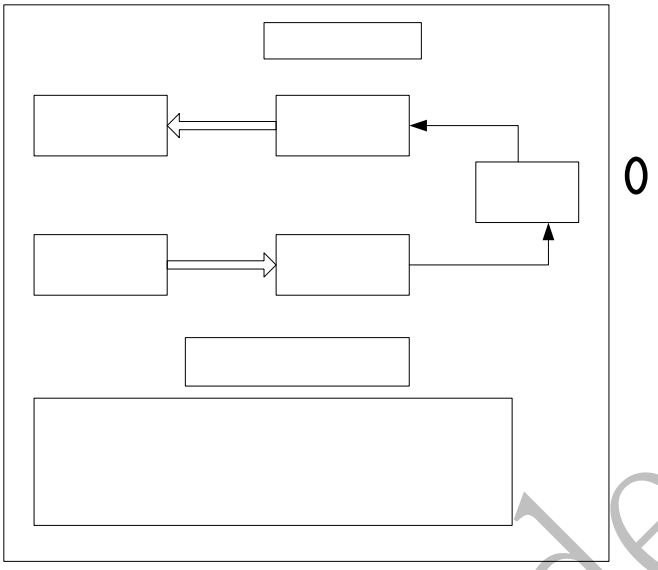
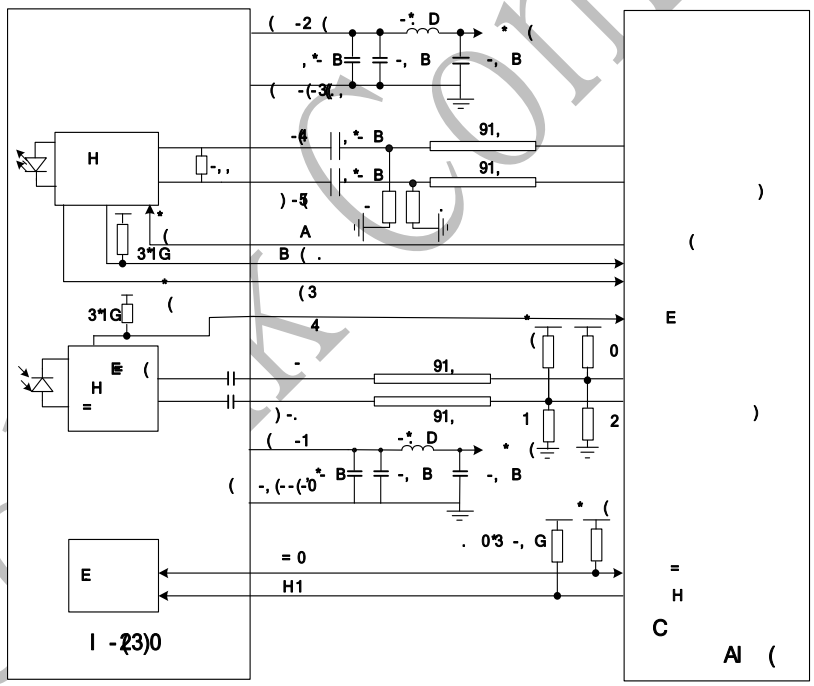


Figure 4 Functional block diagram

## 9 Typical Application Circuit



**Note:**

If output+/- in source(PON MAC IC) are CML buffer, R1,R2 can be omitted.

If input+/- in source(PON MAC IC) are CML buffer, R3,R4,R5,R6 can be omitted.

Default both are LVPECL.