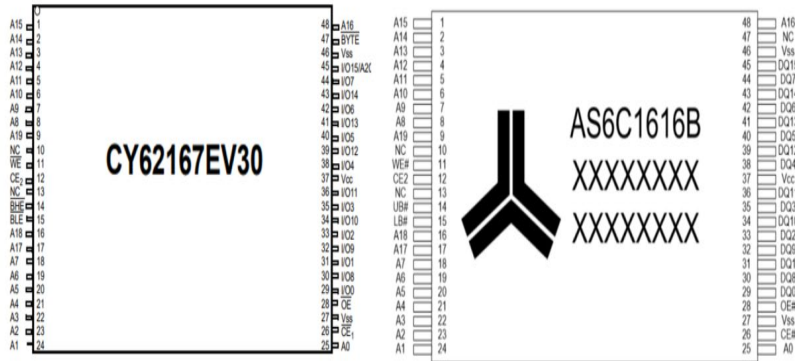


### CY62167EV30LL-45ZXI vs AS6C1616B-45 Comparison

| Part Number & result<br>Parameter               | CY62167EV30LL-45ZXI                                                                  | AS6C1616B-45TIN                              | Comments                                                                                        |
|-------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Product Description</b>                      | <b>Low Power Asynchronous Static RAM</b>                                             |                                              | Same                                                                                            |
| <b>Capacity</b>                                 | 16Mb                                                                                 | 16Mb                                         | Same                                                                                            |
| <b>Memory Organization</b>                      | 1024K x 16bits                                                                       | 1024K x 16bits                               | Same                                                                                            |
| <b>Oper. Power Supply</b>                       | V <sub>CC</sub> = 2.2V ~ 3.6V                                                        | V <sub>CC</sub> = 2.7V ~ 3.6V                | Different                                                                                       |
| <b>Operating Temperature</b>                    | Industrial<br>(-40°C to 85°C)                                                        | Industrial<br>(-40°C to 85°C)                | Same                                                                                            |
| <b>I/O Capacitance</b>                          | CIO: 10pf (Max.)                                                                     | CIO: 8pf (Max.)                              | Comparable                                                                                      |
| <b>Read Cycle Time (tRC)</b>                    | 45ns (Min.)                                                                          | 45ns (Min.)                                  | Same                                                                                            |
| <b>Write Cycle Time (tWC)</b>                   | 45ns (Min.)                                                                          | 45ns (Min.)                                  | Same                                                                                            |
| <b>AddrAccessTime(tAA)</b>                      | 45ns (Max.)                                                                          | 45ns (Max.)                                  | Same                                                                                            |
| <b>V<sub>OH</sub>(V) @ -1.0mA</b>               | 2.4 (Min.)                                                                           | 2.2 (Min.)                                   | Same                                                                                            |
| <b>V<sub>OL</sub>(V) @ 2mA</b>                  | 0.4 (Max.)                                                                           | 0.4 (Max.)                                   | Same                                                                                            |
| <b>V<sub>IH</sub>(V)</b>                        | 2.2 (Min.)                                                                           | 2.2 (Min.)                                   | Same                                                                                            |
| <b>V<sub>IL</sub>(V)</b>                        | 0.6 (Max.)                                                                           | 0.6 (Max.)                                   | Same                                                                                            |
| <b>I<sub>LI</sub> / I<sub>LO</sub>(uA)</b>      | 1 (Max.)                                                                             | 1 (Max.)                                     | Same                                                                                            |
| <b>Operating Current<br/>(Cycle Time= Min )</b> | I <sub>CC</sub> = 35mA (Max.)<br>29mA (Typ.)                                         | I <sub>CC</sub> = 20mA (Max.)<br>12mA (Typ.) | Alliance<br>better                                                                              |
| <b>Operating Current<br/>(Cycle Time=1us)</b>   | I <sub>CC1</sub> = 9mA (Max.)<br>7mA (Typ.)                                          | I <sub>CC1</sub> = 5mA (Max.)<br>3mA (Typ.)  | Alliance<br>better                                                                              |
| <b>Standby Current I<sub>SB1</sub></b>          | 12uA (Max.)<br>1.5uA (Typ.)                                                          | 40uA (Max.)<br>5uA (Typ.)                    | Cypress<br>better                                                                               |
| <b>V<sub>DR</sub></b>                           | 1.5 (Min.)                                                                           | 1.5V (Min.)                                  | Same                                                                                            |
| <b>Package</b>                                  | 48pin TSOP I (12x20mm)                                                               |                                              | Same                                                                                            |
| <b>Pin to Pin<br/>comparison</b>                |  |                                              | Pin47 in<br>Cypress part<br>is<br>configurable<br>for x16 & x8<br>Alliance part<br>is x16 only. |