We claim:

1. An apparatus comprising:

a package substrate; and

a plurality of stacked die on the package substrate, the plurality of stacked die including at least an uppermost die, a lowermost die, and at least one phase change memory die between the uppermost die and the lowermost die, wherein the uppermost die and lowermost die are spacer die,

wherein at least one of the uppermost die and the lowermost die is non-operational device and not electrically coupled to the package substrate.

2. The apparatus of claim 1, further comprising a plurality of layers of a die attach material, wherein one of the plurality of layers of the die attach material is between the package substrate and the lowermost die, and each of the other layers of die attach material are between stacked die.

3. The apparatus of claim 1, wherein at least one of the uppermost die and the lowermost die is an operational device.

4. The apparatus of claim 1, wherein the uppermost die and the lowermost die are to protect the at least one phase change memory die from heat induced bit erasure during a packaging process.

5. A method comprising:

stacking a plurality of die on a package substrate, the plurality of die including a lowermost die, an uppermost die, and at least one phase change memory die between the uppermost and lowermost die; and

applying heat to the plurality of die during a packaging operation,

wherein at least one of the uppermost die and the lowermost die is non-operational device and not electrically coupled to the package substrate.

6. The method of claim 5, wherein at least one of the uppermost die and the lowermost die is an operational device.

7. The method of claim 5, wherein the packaging operation is a mold operation.

8. The method of claim 5, wherein the packaging operation is a plasma operation.

9. The method of claim 5, wherein the packaging operation is a reflow operation.

10. A method, comprising:

applying a first layer of die attach material to a substrate;

stacking a first spacer die on the first layer of die attach material;

applying a second layer of die attach material to the first spacer die;

stacking a phase change memory die on the second layer of die attach material to form a die stack; and

applying heat to the die stack during a packaging operation,

wherein the phase change memory die is electrically coupled to the substrate and wherein the first spacer die ~~and the second spacer die are~~ is not electrically coupled to the substrate.

11. The method of claim 10, wherein the packaging operation is a reflow operation.

12. The method of claim 10, further comprising applying a third layer of die attach material to the phase change memory die and stacking a second spacer die on the third layer of die attach material before applying heat to the die stack during a packaging operation.

13. The method of claim 12, wherein the packaging operation is a mold operation.

14. A system, comprising:

an interconnect;

a processor coupled to the interconnect;

a wireless interface coupled to the interconnect; and

a phase change memory device coupled to the interconnect, wherein the phase change memory device is part of a package including a lowermost spacer die and an uppermost spacer die, and wherein the phase change memory device is physically positioned between the uppermost spacer die and the lowermost spacer die,

wherein the uppermost spacer die and the lowermost spacer die are not electrically coupled to the package substrate.

15. The system of claim 14, wherein the package further includes a first layer of die attach material between the phase change memory device and the uppermost spacer die and a second layer of die attach material between the phase change memory device and the lowermost spacer die.