Output Neurons Of first layer:

b1-p :

$$b1\_p = M\left[\overset{b1\_p\_1}{(a_{1\_p} + x_{1\_1\_p})}, \overset{b1\_p\_2}{(a_{1\_n} + x_{1\_1\_n})}, \overset{b1\_p\_3}{(a_{2\_p} + x_{2\_1\_p})}, \overset{b1\_p\_4}{(a_{2\_n} + x_{2\_1\_n})}, \right.$$

$$\overset{b1\_p\_5}{(a_{3\_p} + x_{3\_1\_p})}, \overset{b1\_p\_6}{(a_{3\_n} + x_{3\_1\_n})}, \overset{b1\_p\_7}{(a_{4\_p} + x_{4\_1\_p})}, \overset{b1\_p\_8}{(a_{4\_n} + x_{4\_1\_n})},$$

$$\overset{b1\_p\_9}{(a_{5\_p} + x_{5\_1\_p})}, \overset{b1\_p\_10}{(a_{5\_n} + x_{5\_1\_n})}, \overset{b1\_p\_11}{(a_{6\_p} + x_{6\_1\_p})}, \overset{b1\_p\_12}{(a_{6\_n} + x_{6\_1\_n})},$$

$$\overset{b1\_p\_13}{(a_{7\_p} + x_{7\_1\_p})}, \overset{b1\_p\_14}{(a_{7\_n} + x_{7\_1\_n})}, \overset{b1\_p\_15}{(a_{8\_p} + x_{8\_1\_p})}, \overset{b1\_p\_16}{(a_{8\_n} + x_{8\_1\_n})},$$

$$\overset{b1\_p\_17}{(a_{9\_p} + x_{9\_1\_p})}, \overset{b1\_p\_18}{(a_{9\_n} + x_{9\_1\_n})}, \overset{b1\_p\_19}{(a_{10\_p} + x_{10\_1\_p})}, \overset{b1\_p\_20}{(a_{10\_n}, x_{10\_1\_n})},$$

$$\overset{b1\_p\_21}{(a_{11\_p} + x_{11\_1\_p})}, \overset{b1\_p\_22}{(a_{11\_n} + x_{11\_1\_n})}, \overset{b1\_p\_23}{(a_{12\_p} + x_{12\_1\_p})}, \overset{b1\_p\_24}{(a_{12\_n} + x_{12\_1\_n})},$$

$$\overset{b1\_p\_25}{(a_{13\_p} + x_{13\_1\_p})}, \overset{b1\_p\_26}{(a_{13\_n} + x_{13\_1\_n})}, \overset{b1\_p\_27}{(a_{14\_p} + x_{14\_1\_p})}, \overset{b1\_p\_28}{(a_{14\_n} + x_{14\_1\_n})},$$

$$\overset{b1\_p\_29}{(a_{15\_p} + x_{15\_1\_p})}, \overset{b1\_p\_30}{(a_{15\_n} + x_{15\_1\_n})}, \overset{b1\_p\_31}{(a_{16\_p} + x_{16\_1\_p})}, \overset{b1\_p\_32}{(a_{16\_n} + x_{16\_1\_n})},$$

$$\overset{b1\_p\_33}{(a_{17\_p} + x_{17\_1\_p})}, \overset{b1\_p\_34}{(a_{17\_n} + x_{17\_1\_n})}, \overset{b1\_p\_35}{(a_{18\_p} + x_{18\_1\_p})}, \overset{b1\_p\_36}{(a_{18\_n} + x_{18\_1\_n})},$$

$$\overset{b1\_p\_37}{(a_{19\_p} + x_{19\_1\_p})}, \overset{b1\_p\_38}{(a_{19\_n} + x_{19\_1\_n})}, \overset{b1\_p\_39}{(a_{20\_p} + x_{20\_1\_p})}, \left. \overset{b1\_p\_40}{(a_{20\_n} + x_{20\_1\_n})}, \right]$$

$$\underline{I\gamma}$$