$$\begin{matrix}
a_{00} & a_{01} & a_{02} & a_{03} & a_{04} \\
a_{10} & a_{11} & a_{12} & a_{13} & a_{14} \\
a_{20} & a_{21} & a_{22} & a_{23} & a_{24} \\
a_{30} & a_{31} & a_{32} & a_{33} & a_{34} \\
a_{40} & a_{41} & a_{42} & a_{43} & a_{44}
\end{matrix}$$

$$\begin{matrix}
 & b_{00} & b_{01} & b_{02} \\
w_{22} & b_{10}\,{\scriptstyle w_{21}} & b_{11}\,{\scriptstyle w_{20}} & b_{12} \\
w_{12} & b_{20}\,{\scriptstyle w_{11}} & b_{21}\,{\scriptstyle w_{10}} & b_{22} \\
w_{02} & w_{01} & w_{00} &
\end{matrix}$$

Convolution (Toeplitz) matrix:

$$
\begin{array}{|ccc|ccc|ccc|c|ccc|}
w_{00} & w_{01} & w_{02} & & w_{10} & w_{11} & w_{12} & & w_{20} & w_{21} & w_{22} & & \\
& w_{00} & w_{01} & w_{02} & & w_{10} & w_{11} & w_{12} & & w_{20} & w_{21} & w_{22} & \\
& & w_{00} & w_{01} & w_{02} & & w_{10} & w_{11} & w_{12} & & w_{20} & w_{21} & w_{22} \\
& & & w_{00} & w_{01} & w_{02} & & w_{10} & w_{11} & w_{12} & w_{20} & w_{21} & w_{22} \\
\end{array}
$$

$$\times
\begin{matrix}
b_{00} \\ b_{01} \\ b_{02} \\ b_{10} \\ b_{11} \\ b_{12} \\ b_{20} \\ b_{21} \\ b_{22}
\end{matrix}
\;=\;
\begin{matrix}
a_{00} \\ a_{01} \\ a_{02} \\ a_{03} \\ a_{04} \\ a_{10} \\ \vdots \\ \vdots \\ a_{34} \\ a_{40} \\ a_{41} \\ a_{42} \\ a_{43} \\ a_{44}
\end{matrix}$$