

$$\begin{pmatrix} \cos(\theta_3) (\cos(\theta_1) \cos(\theta_2) - \sin(\theta_1) \sin(\theta_2)) - \sin(\theta_3) (\cos(\theta_1) \sin(\theta_2) + \cos(\theta_2) \sin(\theta_1)) & -\cos(\theta_3) (\cos(\theta_1) \sin(\theta_2) + \cos(\theta_2) \sin(\theta_1)) \\ \cos(\theta_3) (\cos(\theta_1) \sin(\theta_2) + \cos(\theta_2) \sin(\theta_1)) + \sin(\theta_3) (\cos(\theta_1) \cos(\theta_2) - \sin(\theta_1) \sin(\theta_2)) & \cos(\theta_3) (\cos(\theta_1) \cos(\theta_2) - \sin(\theta_1) \sin(\theta_2)) \\ 0 & 0 \end{pmatrix}$$