

$$F = (\mathcal{F}_{1,1,0,0,0}, \mathcal{F}_{1,0,1,0,0}, \mathcal{F}_{0,1,1,0,0}, \mathcal{F}_{1,1,1,0,0}, \mathcal{F}_{2,1,1,0,0}, \mathcal{F}_{1,1,2,0,0})^T$$