$$
\begin{aligned}
\Psi_{97} &= C_1 \left(|02uu\rangle + i\,|0uu2\rangle + |20uu\rangle + i\,|2uu0\rangle + i\,|u02u\rangle + i\,|u20u\rangle - |uu02\rangle - |uu20\rangle \right) \\
&\quad + C_2 \left(i\,|duuu\rangle - |uduu\rangle - i\,|uudu\rangle + |uuud\rangle \right)
\end{aligned}
$$

$$
C_1 = \frac{\left(\frac{1}{16} + \frac{i}{16}\right)\,\left(-U + \sqrt{16\,t^2 + U^2}\right)}{t}
$$

$$
C_2 = \frac{i}{2}
$$