Darboux-Lamé equation and isomonodoromic deformation on the torus

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For the n-th Lamé equation

$$\frac{d^2 f}{dx^2} = (n(n+1)\wp(x,\tau) - \lambda)f,$$

where $\wp(x,\tau)$ is Weierstrass elliptic function with the primitive periods 1 and τ, $\Im\tau > 0$, and n is a natural number, one can construct the double Darboux transformation via some specified eigenfunction, which is the 1-parameter family of ordinary differential equations with the algebro geometric elliptic potentials. It is shown that such 1-parameter family of ordinary differential equations is the isomonodromic family of Fuchsian equations on the torus $\mathbb{C}/L$, where $L = \mathbb{Z} \oplus \mathbb{Z}\tau$ is the lattice.