Let \( g \) be a simple Lie algebra and \( V[0] = V_1 \otimes \cdots \otimes V_n[0] \) the zero weight subspace of a tensor product of \( g \)-modules. The trigonometric KZB operators are commuting differential operators acting on \( V[0] \)-valued functions on the Cartan subalgebra of \( g \). Eigenfunctions to the operators are constructed by the Bethe ansatz. We introduce a scalar product such that the operators become symmetric, and the square of the norm of a Bethe eigenfunction equals the Hessian of the master function at the corresponding critical point. (Received September 20, 2010)