A converse theorem for degree 2 L-functions

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I'll present the following converse theorem. If a degree 2 L-function $F(s)$ has conductor 1, an Euler product expansion and a pole at $s = 1$, then $F(s)$ is the square of the Riemann zeta function. This requires the study of certain properties of the linear twists of degree 2 L-functions.