

Concept Question 9-7: What does the Parks-McClellan design procedure do?

It selects the coefficients of an FIR filter to satisfy the minimax criterion, meaning that the largest magnitude of the difference between the filter's frequency response and the desired response is minimized. The minimax criterion is

$$\text{MIN}_{h[n]} \text{MAX}_{\Omega} \{ E(e^{j\Omega}) \}$$