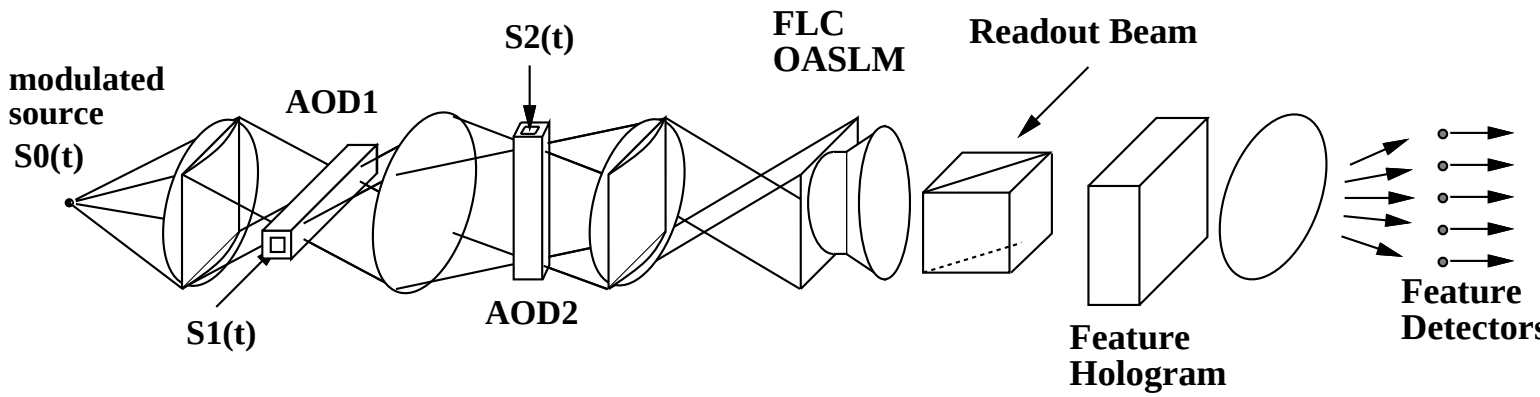
Throughput of Radar Target Recognition System



Architectural Potential	Experimentally Demonstrated	
$N=3$		Number of Inputs
$B=10^8-10^9$ Hz	(2×10^7)	Input Bandwidth
$B_o=10^4$ Hz		Output Bandwidth− FLC SLM limited
$B_o=10$ Hz		Output Bandwidth− Hughes SLM limited
$M=m_x m=10^6$	(5×10^4)	Fan−out
$k=\lg P/m=\lg(B/B_o)/m$		Algorithmic Ineficiency
$Mk=2\times10^4$	(4×10^3)	Including algorithmic inefficiency
$Q=1000$	(10)	Number of stored Holograms
$NBMk+QB_oMk'=7\times10^{14}$	(3×10^{11})	Computational Throughput