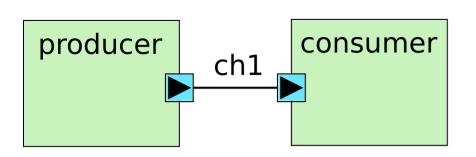
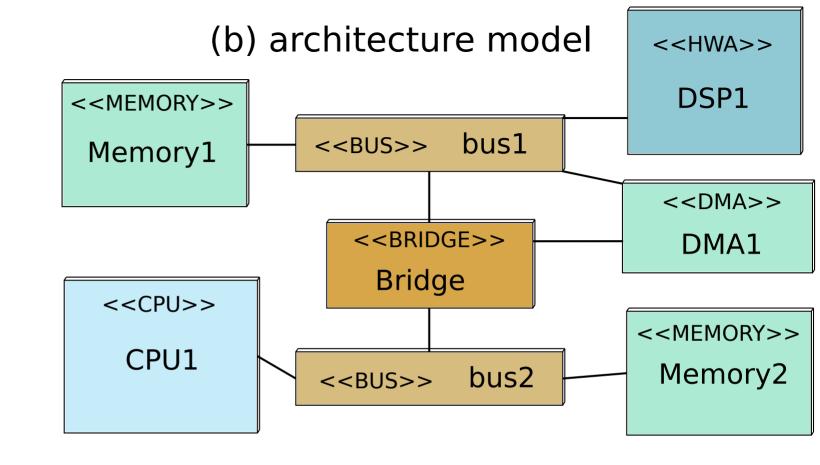
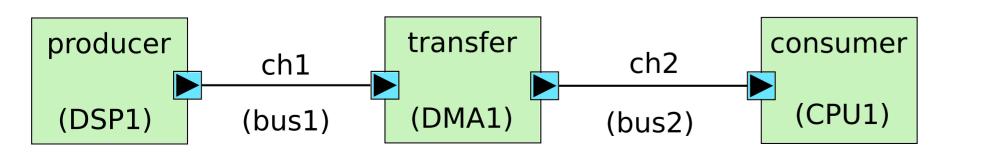
(a) application model







(c) mapping model