The aim of this work is to study the reliable control design problem for uncertain interconnected systems. The continuous $H_\infty$ control problem is solved via elementary manipulations on linear matrix inequalities (LMI). A more practical model of actuators or control channels failures than outage is adopted. Based on LMI design approach, a class of reliable decentralized local state feedback controllers is presented. Moreover, the approach offers new potentials for problems that cannot be handled using earlier techniques. We obtain linear parameter LMI constraints, allowing parametric Lyapunov functions. The resulting control systems are robustly stable against plant uncertainty and failures.