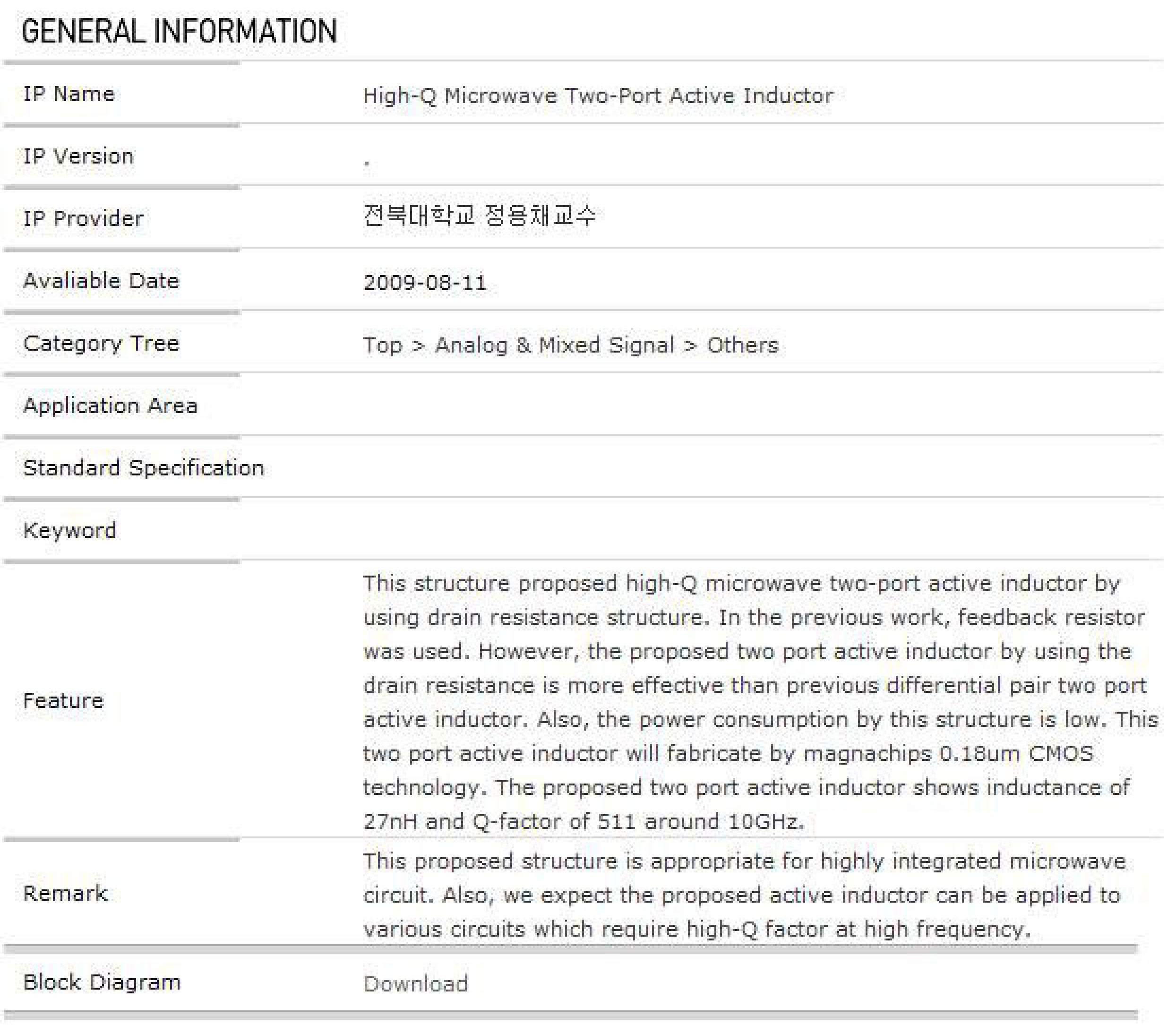

GENERAL INFORMATION

IP Name	High-Q Microwave Two-Port Active Inductor
IP Version	.
IP Provider	전북대학교 정용채교수
Avaliable Date	2009-08-11
Category Tree	Top > Analog & Mixed Signal > Others
Application Area	
Standard Specification	
Keyword	
Feature	This structure proposed high-Q microwave two-port active inductor by using drain resistance structure. In the previous work, feedback resistor was used. However, the proposed two port active inductor by using the drain resistance is more effective than previous differential pair two port active inductor. Also, the power consumption by this structure is low. This two port active inductor will fabricate by magnachips 0.18um CMOS technology. The proposed two port active inductor shows inductance of 27nH and Q-factor of 511 around 10GHz.
Remark	This proposed structure is appropriate for highly integrated microwave circuit. Also, we expect the proposed active inductor can be applied to various circuits which require high-Q factor at high frequency.
Block Diagram	Download